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**Separation or Unification for Taiwan:  
An Economic Comparison**

James P. Bell

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## **PREFACE**

Research for this paper was funded under the independent research program of the Institute for Defense Analyses. The economic issues affecting the prospects for unification of Taiwan and mainland China are of interest to DoD because the continued political division of the two areas remains a major source of instability for the relations between the United States and the People's Republic of China.

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## SUMMARY

### A. BACKGROUND

The continued division of Taiwan from mainland China is a dangerously unresolved issue in which the United States has a continuing interest. The U.S. government now officially recognizes the People's Republic of China (PRC) government, which controls mainland China and not the Republic of China (ROC) government, which controls Taiwan. However, as confirmed in the Taiwan Relations Act, the United States expects Taiwan's future to be determined peacefully and would view other approaches with grave concern. Further, the U.S. continues to sell defensive arms to Taiwan and maintains unofficial relations with the ROC government. The U.S. stance is a major irritant to the PRC and an obstacle to stable long-term relations.

President William J. "Bill" Clinton, speaking recently to White House reporters about rising tensions between the PRC and ROC, observed:

Eventually time will take care of this, and they'll decide upon the appropriate resolution of this.<sup>1</sup>

But how is time supposed to resolve the problem when the two sides have fundamentally different visions of the future? The PRC insists on socialism with "Chinese characteristics" under the dictatorship of the Chinese Communist Party (CCP), while the ROC demands a capitalist economy with a democratically elected government. Waiting for these visions to evolve and converge will take a very long time.

Another possibility with a shorter horizon is that Taiwan could unify with the mainland as a special administrative region (SAR) under PRC authority. Like Hong Kong after July 1, 1997, a Taiwan SAR would retain its current socioeconomic system for decades and would enjoy a certain measure of autonomy within the PRC. The PRC has had this offer on the table since 1981, however, and the ROC has not found it appealing. Under the status quo, after all, Taiwan is able to benefit from growing economic ties across the Taiwan Strait without sacrificing its other goals.

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<sup>1</sup> See Central News Agency, February 8, 1996, 64.

This paper explores how Taiwan might respond to a less benign proposition. If it were given a choice between SAR status and complete economic separation from the mainland, would it find SAR status acceptable? In a future crisis, a frustrated and embarrassed PRC might present Taiwan with such a choice, with or without accompanying military threats.<sup>2</sup> While political and ideological factors would probably dominate Taiwan's decision, economic effects would also be considered. This paper focuses on those economic effects, asking whether Taiwan would be better off economically under a separation scenario or as a SAR.

## B. FINDINGS

On an unofficial, indirect basis, Taiwanese businesses have established substantial economic ties to the mainland, particularly since 1987. While the ROC has now legalized many forms of cross-strait investment and trade, it still insists that transactions be indirect. Both trade and investment must be conducted through Hong Kong or some other third area rather than directly with the mainland. Direct commercial, transportation, and postal linkages with the mainland are prohibited.

Through 1995, the PRC approved an estimated \$28.3 billion in foreign direct investment (FDI) from Taiwan. While this made Taiwan the mainland's second largest source of FDI, after Hong Kong, it is only a fraction of what might be invested if the ROC government were to relax its controls. Those controls tend to limit mainland FDI to relatively small projects in industries involving lower technology and labor-intensive methods. The ROC still bars virtually all FDI from the mainland to Taiwan.

Cross-strait trade is similarly substantial and dominated by outward flows. In 1995, Taiwan exported an estimated \$17.9 billion in goods to the mainland but imported only \$3.1 billion. The lopsided nature of cross-strait trade reflects the ROC's extensive controls limiting what kinds of products may be imported and what kinds of companies may import them. The controls primarily restrict imports to raw materials and semifinished industrial products. Goods imported from the mainland account for only 3 percent of Taiwan's total imports, so a cutoff of supplies would not pose a serious problem. Exports to the mainland, in contrast, account for 16 percent of total exports, so a PRC embargo would

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<sup>2</sup> For example, Hong Kong's *South China Morning Post* recently reported on a study by the PRC's Taiwan Affairs Office, assessing the potential impact on Taiwan of a unilateral cut in cross-strait economic ties by the PRC. Mainland President Jiang Zemin reportedly hopes to deepen economic ties and eventually use them to force Taiwan to accept the PRC's unification terms. See Central News Agency, August 24, 1996, 388-89.

materially impact Taiwan's export producers. ROC officials have previously viewed 10 percent as the maximum safe share.

Cross-strait economic ties are mutually beneficial and may give the ROC some amount of leverage over the PRC. Imports from Taiwan, for example, accounted for 13.5 percent of the mainland's total imports in 1995, a considerable share. Moreover, FDI from Taiwan represented 8.3 percent of total mainland FDI between 1992 and 1994. Hong Kong, in contrast, supplied 63.8 percent of the FDI during that period. Taiwan, with a gross domestic product (GDP) nearly twice that of Hong Kong, could provide much more FDI in the absence of ROC controls.<sup>3</sup>

### C. CONCLUSIONS

Not surprisingly, Taiwan's existing unofficial ties to the mainland seem economically superior to either complete separation or unification as a SAR. Under the status quo, Taiwan benefits from significant and growing economic ties to the mainland yet preserves its economic system and policy. A more difficult and ultimately unanswerable question is whether Taiwan would be better off under a separation versus a SAR scenario.

A separation scenario would tend to isolate Taiwan, not only from the mainland but also from many of its other economic partners. The palpable hostility of the mainland toward Taiwan would engender uncertainty about Taiwan's security and long-term reliability as a partner in production or as a supplier. Taiwan's inward FDI and exports would suffer as a result. Moreover, the PRC is likely to accompany the termination of cross-strait ties with an economic boycott against Taiwan. It would pressure Taiwan's economic partners not to do business with it. While such a boycott could only be partially effective, it would damage Taiwan and further erode the confidence of investors.

A SAR scenario would enhance rather than sunder Taiwan's mainland ties. While the PRC would continue to protect its inefficient state-owned enterprises (SOEs), the elimination of ROC controls on cross-strait transportation, investment, and trade would create new business opportunities. Two-way cross-strait capital flows would help restructure Taiwan's economy, increasing productivity to the extent that market forces were allowed to guide the restructuring. Taiwan's goal of becoming a regional hub providing financial and entrepot services like Hong Kong could be furthered.

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<sup>3</sup> FDI estimates for Hong Kong are somewhat inflated since investors from many countries channel their investments through Hong Kong subsidiaries.

At the same time, however, Taiwan's economy would acquire a new master. The industrial policy of the PRC's central government would dominate that of Taiwan's SAR government, blocking some of Taiwan's development objectives. Mainland enterprises would buy and push their way into Taiwan's economy just as they have in Hong Kong, seizing lucrative opportunities, gaining control of industries considered to be strategic, and generally preparing Taiwan for its socialist future. The ROC's trend toward a transparent business environment based on the rule of law would be reversed and Taiwan's attractiveness for domestic and foreign investors would suffer as a result.

If Taiwan had to choose between the separation and SAR scenarios based on economic grounds alone, the preferable choice would depend importantly on the planning horizon. In the short to medium run, the SAR scenario seems superior. It would not entail the trauma and short-run cost of terminating existing cross-strait ties as the separation scenario would. Instead, SAR status would enhance ties with the mainland as well as avoid a destructive economic boycott orchestrated by the PRC. The separation scenario, in contrast, could easily leave the ROC with a stagnant, harassed, and increasingly isolated economy.

From a long-term perspective, however, the choice is less clear. Under the SAR scenario, Taiwan's SAR status would steadily erode and its economy would increasingly take on socialist characteristics, including SOE ownership, subordination to central government policy, local political interference, and distorted incentives. Under the separation scenario, in contrast, Taiwan would retain its largely capitalist economy and self-determined industrial policy. Eventually, the extent of the PRC-led economic boycott would stabilize and perhaps erode, allowing Taiwan to develop a stable and profitable niche in the global economy. In the end, Taiwan would have an efficient, capitalist economy rather than a distorted socialism with Chinese characteristics.

Moreover, the separation scenario is potentially reversible, while the SAR scenario is not. The previous period of cross-strait hostility and mutual isolation lasted 30 years, from 1949 to 1979. Similarly, a new separation scenario might eventually give way to a political thaw and resumed economic ties, bringing Taiwan back to the status quo it now prefers. The SAR scenario, on the other hand, offers Taiwan no such hope. Once the PRC gains sovereignty over Taiwan, it will keep it. In that case, Taiwan could only hope that economic reforms would lead to a more efficient market economy and perhaps an erosion of socialism on the mainland.

This study focuses on how Taiwan might choose between the separation and SAR scenarios. It should nevertheless be noted that the PRC would put its own interests at risk

by presenting such an ultimatum. Cross-strait ties, after all, are mutually beneficial. Cutting those ties would deny important employment opportunities and export earnings to the mainland. Moreover, discriminating against Taiwanese investors, perhaps to the point of expropriating their businesses, would unsettle foreign investors from other countries and threaten future FDI inflows. An attempt by the PRC to coerce Taiwan might also induce sanctions by the U.S. and its allies against the PRC. In light of these potential costs, and the notorious ineffectiveness of economic sanctions in general, the PRC is likely to hesitate before delivering its ultimatum. It might nevertheless accept the risks if it were sufficiently provoked or Taiwan seemed patently vulnerable.

The conclusions of this paper do not suggest that the future of Taiwan will take care of itself anytime soon. From an economic perspective, there is little reason to think that the Taiwanese would accept SAR status voluntarily. They might consider it seriously if the PRC forced them to choose between SAR status and a termination of cross-strait ties, but that would amount to the coercion decried by the U.S. in the Taiwan Relations Act.

Indeed, one of the many questions left unanswered by this paper is how the U.S. would react if the ROC were faced with a termination of its cross-strait economic ties. Future studies should explore the circumstances in which the U.S. should respond and especially what the U.S. could do to impose counter-sanctions against the PRC or to break a PRC-led embargo against Taiwan.

## I. INTRODUCTION

The division of Taiwan from mainland China is a dangerously unresolved issue in which the United States has a continuing interest. The mainland is ruled by the People's Republic of China (PRC) under the dictatorship of the Chinese Communist Party (CCP). Taiwan is governed by the Republic of China (ROC) under the democratically elected Kuomintang government. Figures I-1 and I-2 provide maps of the mainland and Taiwan.

### A. THE U.S. ROLE

The estrangement of Taiwan from the mainland dates back to 1949, when the Kuomintang lost the civil war, moved the ROC government to Taiwan, and abandoned the mainland to the CCP.<sup>1</sup> The CCP dropped its plans to seize Taiwan as well after the outbreak of the Korean War in June 1950, when President Truman sent the U.S. Seventh Fleet to neutralize the Taiwan Strait and the PRC moved military forces north to intervene in the war. In December 1954, the U.S. signed a mutual defense treaty with the ROC that effectively guaranteed that Taiwan and the mainland would remain apart for the foreseeable future.

In 1979, when the United States recognized the PRC and agreed to terminate its defense treaty with the ROC, it nevertheless enacted the Taiwan Relations Act, which noted that the U.S. expected Taiwan's future to be determined by peaceful means, provided for defensive arms sales, made the use of unpeaceful means—including boycotts and embargoes against Taiwan—a matter of grave concern, and promised to maintain the capacity to resist force or coercion against Taiwan. While the Taiwan Relations Act is ambiguous about how the United States would react to a mainland attack, it certainly leaves open the possibility that the U.S. would intervene.

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<sup>1</sup> These events are recounted in Chang (1993), 2-3.



Figure I-1. Map of Taiwan and Mainland China





The U.S. seemingly cannot escape from its involvement in China's civil war until the mainland and Taiwan themselves resolve it. President William J. "Bill" Clinton, speaking to White House reporters about rising tensions between the PRC and ROC, observed:

Eventually time will take care of this, and they'll decide upon the appropriate resolution of this.<sup>2</sup>

Similarly, former Secretary of State James A. Baker said:

A de jure solution is probably not in the cards in the near term. In my view, the problem will ultimately resolve itself as a de facto matter, provided substance is allowed to prevail over symbols.<sup>3</sup>

But how is time supposed to resolve the problem peacefully? One possibility is that political and socioeconomic systems and standards of living in Taiwan and the mainland will evolve and eventually converge, so that the substantive reasons for their continued division will dissolve. Barring a revolution in the PRC or ROC, this appears to be a long-term proposition at best. Another possibility with a shorter horizon is that the PRC will economically coerce the ROC into accepting its terms for unification. The Taiwan Relations Act notwithstanding, the PRC might present Taiwan with a choice between terminating all cross-strait economic ties or unifying as a special administrative region (SAR) under PRC authority. This paper explores the substance of that proposition. If the choice were made based on economic costs and benefits, would Taiwan find it preferable to terminate cross-strait relations or to unify as a SAR?

## **B. ROC POLICIES**

The ROC's bottom line is that it will not reunite with the mainland until the mainland adopts democracy and a free-market economy. The mainland must renounce Marxist-Leninism, and unification must occur under a banner of freedom, democracy, and equitable distribution of wealth.<sup>4</sup>

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<sup>2</sup> See Central News Agency, February 8, 1996, 64.

<sup>3</sup> See Central News Agency, February 11, 1996, 115.

<sup>4</sup> See Clough (1993), 131; Wu (1994), 91; Gu (1995), 82; and Central News Agency, March 26, 1996, 287.

The ROC's Guidelines for National Unification call for a three-stage process:<sup>5</sup>

Stage 1 Exchanges and reciprocity

Stage 2 Mutual trust and cooperation

Stage 3 Consultation and unification

The two sides are currently at the first stage, which is supposed to include mutual exchanges to increase understanding and reduce hostility. Current activities include indirect cross-strait trade and investment, personal and cultural exchanges, and meetings between two semi-official intermediary bodies, the ROC's Straits Exchange Foundation (SEF) and the PRC's Association for Relations across the Straits (ARATS).

The second stage is envisioned as a positive, cooperative period that would include official contacts and direct commercial, transport, and postal links across the Taiwan Strait. It would also entail joint development of southeastern China and other parts of the mainland. However, the ROC's conditions for proceeding to the second stage are rather strenuous. As President Lee Teng-hui declared in his May 20, 1990, inaugural address:

If the Chinese Communist authorities . . . implement political democracy and a free economic system, renounce the use of military force in the Taiwan Straits and not interfere with our development of foreign relations on the basis of a one-China policy, we would be willing, on a basis of equality, to establish channels of communication, and completely open up academic, cultural, economic, trade, scientific and technological exchange, to lay a foundation of mutual respect, peace and prosperity.<sup>6</sup>

The third stage under the Guidelines for National Unification would include serious preparation for unification. A bilateral organization would be established to map out the political and economic structure of a unified China and design a suitable constitutional system.

The ROC believes that, today, there is one China with two political entities. The ROC is constitutionally the national government. Since May 1, 1991, however, when the ROC repealed the Temporary Provision for the Period of Mobilization and Suppression of Communist Rebellion, the ROC has, in effect, recognized the PRC as a de facto political

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<sup>5</sup> The Guidelines for National Unification are discussed, for example, in *Yearbook of the Republic of China* (1996).

<sup>6</sup> See Clough (1994), 131. The ROC has prohibited official contact, negotiation, and compromise with the PRC under its "three nos" policy until the conditions outlined by Lee are met. See Aspaturian (1993), 136; Cheng (1994), 70; and Leng and Lin (1995), 178.

entity governing the mainland.<sup>7</sup> The ROC has renounced the use of force to achieve its unification goals and no longer challenges the PRC for the right to represent the mainland internationally.<sup>8</sup>

### C. PRC POLICIES

The PRC's bottom line is that Taiwan must reunite under the authority of a PRC government dominated by the CCP and constitutionally committed to socialism with Chinese characteristics. On March 30, 1979, Deng Xiaoping articulated four principles that were later enshrined in the PRC's 1982 constitution, committing the PRC to:

- Keep to the socialist road
- Uphold the people's democratic dictatorship
- Uphold the leadership of the Communist Party
- Uphold Marxist-Leninism and Maoist thought<sup>9</sup>

The PRC accepts that a period of adjustment is necessary to equalize living standards, integrate the economies, and prepare Taiwan for socialism. However, the PRC wants unification to occur first and adjustment second. Thus, the PRC offers to provide extended SAR status to Taiwan.

In the short term, the PRC encourages the establishment of direct cross-strait trade, transport, and postal links and personal and cultural exchanges to reduce hostility and prepare for more substantive political talks on unification. The PRC's condition for material progress is that the ROC accept the PRC's view of one China, wherein the PRC is the sole legitimate representative of China and Taiwan is a part of that China.<sup>10</sup> The ROC government is at best a local authority in Taiwan. The PRC is adamant that the ROC should cease its efforts at international representation and stop trying to create two Chinas or one China and one Taiwan.

The PRC reserves the right to use force against Taiwan and, over the years, has announced a number of conditions under which it might do so. It might use force if Taiwan

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<sup>7</sup> See Clough (1993), 139, and *Yearbook of the Republic of China* (1996).

<sup>8</sup> For example, the ROC seeks membership in the United Nations in order to represent the people of Taiwan, but does not challenge the PRC's own membership. See Central News Agency, July 22, 1996, 352.

<sup>9</sup> See Wu (1994), 91.

<sup>10</sup> See *Free China Journal (Politics)*, December 29, 1995, 140.

allied with the Soviet Union, sought independence, avoided unification for too long, developed nuclear weapons, or fell into civil disorder.<sup>11</sup>

The PRC's policies are thus incompatible with those of the ROC. The PRC insists on a CCP dictatorship and socialism, while the ROC demands democracy and a free-market economy. While both sides agree that a lengthy period of adjustment is needed before socioeconomic systems can be merged, the PRC insists on subjecting Taiwan to PRC sovereignty as a SAR, while the ROC wants to retain sovereignty during the adjustment period. Both sides also agree that the process should begin with cross-strait economic ties and other exchanges, but they diverge in that each side insists that the other side accept its view of what one China means now and during the adjustment period.

#### **D. MILITARY THREAT TO THE STATUS QUO**

It is plausible that the status quo might continue for a period of time. The PRC has not announced a specific timetable for reunification, and since 1979 it has been pursuing a long-term strategy of using economic ties and other exchanges to reduce hostility, create interdependence, and prepare for eventual unification. As noted above, the PRC has defined the principal threats to maintaining the status quo, namely the reasons why it might use force against Taiwan. Chief among these would be Taiwan's declaring independence or acting too explicitly independent. In the past, moreover, the PRC also threatened to use force if Taiwan waited too long. There could come a point when the PRC loses patience, sees an opportunity to act, and issues an ultimatum.

The PRC has reason to be frustrated with the slow pace of its reunification strategy. After the U.S. recognized the PRC on January 1, 1979, there was a sense that Taiwan's fate was sealed—it had been abandoned and inevitably would have to agree to PRC terms. In 1982, the U.S. even agreed in a joint communique with the PRC that it would limit and gradually reduce its arms sales to Taiwan. Since that time, however, Taiwan's tremendous economic success and increasing democratization have strengthened its ties to the developed countries, and particularly to the United States. It now appears that Taiwan could survive under the status quo indefinitely and that the U.S. remains substantively but unofficially involved.

To move militarily against Taiwan would be risky for the PRC. If an attack seemed to be unprovoked, the U.S.—and probably its allies—would respond with tough economic

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<sup>11</sup> See Yahuda (1995), 51; Wu (1994), 95; and Aspaturian (1993), 138.

sanctions against the PRC. The U.S. might provide indirect military support to Taiwan, raising the risk of a direct U.S.-PRC confrontation.<sup>12</sup> The PRC might nevertheless attack or blockade Taiwan for reasons of nationalism or internal politics if it felt sufficiently provoked by the ROC. Moreover, the PRC's chances of success seem to increase with time as its economy continues to grow faster than Taiwan's, enabling its military modernization program to grow faster as well. In addition, while the U.S. remains firmly committed to maintaining a forward presence and playing a military role in East Asia, some in the region question the durability of that commitment, especially in light of budget pressures in the United States.

A PRC-initiated confrontation might begin with a series of intimidating exercises, such as those the PRC unleashed in the Taiwan Strait between July 1995 and March 1996 in response to a perceived affront by the ROC. In June 1995, the ROC's President Lee Teng-hui visited the United States and gave a public speech attended by members of Congress at Cornell University. While technically unofficial, the visit was enabled by a supportive congressional resolution and violated Secretary of State Warren Christopher's assurances to the PRC that the visit would not be permitted. In Taiwan, Lee's journey was celebrated as a great diplomatic triumph, but the PRC reacted angrily, terminating an important meeting scheduled between the unofficial liaison organizations of the PRC and the ROC and generally freezing cross-strait negotiations.<sup>13</sup>

The PRC then initiated the aforementioned series of military exercises in and near the Taiwan Strait. While the PRC routinely holds exercises, this series involved larger forces, pointedly practiced mock invasions, and included the firing of tactical ballistic missiles near Taiwan. The People's Liberation Army's (PLA's) program reached its peak in March 1996 when it fired ballistic missiles to within 30 kilometers of Taiwan's principal northern and southern ports. The PLA's intention of intimidating Taiwan was so stark that the United States felt compelled to send two aircraft carriers to observe the firings.

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<sup>12</sup> The PRC, particularly under Mao Tse-tung, has demonstrated a willingness to risk military confrontation with the U.S. on several occasions, including Korea in 1950, the Taiwan Strait in the 1950s, and North Vietnam in the 1960s.

<sup>13</sup> In April 1993, the heads of the two organizations met in Singapore in a meeting that was viewed as a dramatic breakthrough, although only minor technical agreements were reached. A series of lower-level meetings between the two organizations followed. The chairmen, Koo Chen-fu from the ROC and Wang Daohan from the PRC, were scheduled to meet a second time in August 1995. The PRC canceled the Koo-Wang meeting as well as all further lower-level meetings. See Central News Agency, April 29, 1996, 296.

The exercises overlapped the ROC's first direct presidential election on March 23rd, causing many in Taiwan to infer that the PRC was attempting to affect its outcome and warning the Taiwanese not to vote for the openly pro-independence Democratic Progressive Party (DPP) or the allegedly pro-independence Lee Teng-hui. As it turned out, Lee won an impressive 54 percent of the vote in a four-way race.<sup>14</sup> More ominously, the exercises can be interpreted as a serious strategic warning that the PRC means what it says and is willing to use force if Taiwan moves toward independence.<sup>15</sup>

## **E. ECONOMIC LEVERAGE**

The PRC has economic as well as military leverage that it could bring to bear against Taiwan. Businessmen from Taiwan have made a huge investment on the mainland and enjoy substantial cross-strait export sales. Moreover, the PRC has the power to interfere with Taiwan's economic relations with other countries. It is nevertheless important to note that the PRC has not used or even threatened to use its economic leverage.<sup>16</sup> Cross-strait economic relations suffered a bit during the tensions of 1995 and 1996, as businessmen reacted to uncertainty and to economic circumstances on the mainland. However, there was no hint of politically motivated interference with economic ties by the PRC. The PRC seems committed to a long-range strategy of deepening cross-strait economic relations in order to promote eventual unification. The PRC also benefits from those ties and the jobs they create on the mainland.<sup>17</sup>

The PRC nevertheless has substantial and growing economic leverage. In a major crisis, the PRC might choose to use that leverage in conjunction with military threats or perhaps to avert the necessity of military action. The mainland could apply pressure to Taiwan's businessmen, using the carrot of increased access to mainland markets and the stick of reduced access to mainland markets, interrupted shipments to Taiwan, increased

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<sup>14</sup> The DPP candidate, Peng Ming-min, received a disappointing 21 percent of the vote, while DPP candidates for the National Assembly received slightly less than 30 percent, which was viewed as sub-par. The PRC thus could be pleased at the poor DPP showing yet disappointed at the strong showing of Lee. See Central News Agency, March 23, 1996, 248-52.

<sup>15</sup> If the PRC was also testing U.S. intentions, the deployment of the carriers and the statements of U.S. officials clearly demonstrated U.S. concern.

<sup>16</sup> Indeed, in a recent talk with Taiwanese businessmen, the PRC's President Jiang Zemin promised, under all circumstances and despite political differences, to protect fully Taiwanese business interests on the mainland. See Central News Agency, August 29, 1996, 452.

<sup>17</sup> Because cross-strait economic ties are mutually beneficial, the PRC would not lightly jeopardize them. However, if sufficiently provoked or if Taiwan appeared particularly vulnerable, the PRC might well attempt to achieve unification with Taiwan through economic coercion.

taxes, or even expropriation of properties.<sup>18</sup> Further, the PRC could institute an economic boycott of Taiwan, interfering with Taiwan's economic relations around the world.

## **F. ORGANIZATION OF PAPER**

This paper is concerned with the PRC's economic leverage over Taiwan and especially with how Taiwan might react if it had to choose between no cross-strait economic ties and unification with the mainland under PRC terms. In Chapters 2 and 3, the paper documents the status quo of cross-strait ties, looking first at investment and then at trade. Chapters 4 and 5 examine Taiwan's options of separating economically from the mainland or uniting with it as a SAR within the PRC.

The separation scenario of Chapter 4 explores whether the ROC would be viable without economic ties to the mainland. Separation might be threatened or initiated by the PRC, as suggested above, in an attempt to get the ROC to agree to peaceful unification on PRC terms. The PRC might hope that Taiwanese businessmen, dreading the loss of mainland ties, would pressure the ROC government to accept PRC terms or even install a pro-unification government.<sup>19</sup> Separation might also be threatened or initiated by the ROC government. It might see separation as a preemptive strike against mainland pressure or as a way to use its own economic leverage to obtain better treatment from the PRC. Whether separation was initiated by the PRC or the ROC, it would necessarily limit the ROC's economic potential by denying it valuable options. The economy would suffer but probably survive, although many businesses would be damaged.

The SAR scenario of Chapter 5 explores how the economic status quo might be affected if Taiwan were to unite with the mainland as a SAR under PRC authority. The ROC might acquiesce to the PRC's unification demands rather than endure a threatened separation scenario. Alternatively, it might be forced by its citizens to acquiesce after they taste the pain of an actual separation. In either case, uniting as a SAR would initially preserve the economic status quo and open up new opportunities in cross-strait relations. However, the PRC's central government would inevitably intrude into the SAR's economic

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<sup>18</sup> Taiwan's larger businesses already lobby the ROC government for a relaxation of controls, for example, on cross-strait shipping or investment on the mainland. Their pressure has helped promote the considerable liberalization that has occurred since 1987. See Central News Agency, August 19, 1996, 304.

<sup>19</sup> Given the ROC's lively democracy, its businessmen might rely on an electoral scare campaign. If they were able to engineer a coup, popular outrage might lead to the type of public disorder that the PRC has said could trigger its own military intervention.



affairs, constraining its development and elbowing some current owners aside in preparation for Taiwan's socialist future.

The following chapters include a number of tables depicting Taiwan's investment and trade patterns. Note that the totals on these tables do not always match the sum of the data presented, due to rounding of the numbers shown.

## **II. INVESTMENT**

Foreign direct investment (FDI) plays a crucial role in determining the character of Taiwan's economy. Outward FDI to the mainland and Southeast Asia is a principal driver of Taiwan's exports to those areas, enabling many Taiwanese companies to survive despite high wages and increasing labor shortages in Taiwan itself. Further, incoming FDI helps cement ties between Taiwan and foreign multinational corporations, which supply technology and steady, long-term markets. The separation and SAR scenarios would threaten Taiwan's FDI relationships in different ways. This chapter provides background information on the extent of Taiwan's FDI and on the FDI restrictions imposed by the ROC government.

### **A. FDI ON MAINLAND**

Investment on the mainland by Taiwanese businessmen certainly constitutes the most intimate economic link across the Taiwan Strait. Taiwanese investment is a key source of mutual dependency, providing jobs and export earnings for the mainland and potentially profitable access to resources and markets for the Taiwanese. This interdependency leaves both sides vulnerable to a loss of benefits in the event of hostilities or economic sanctions. At the same time, the evolving characteristics of Taiwanese investment may suggest directions that a future integration of the two economies would take. This section reviews Taiwan's mainland investment, keeping both the vulnerability and the integration questions in mind.

#### **1. Historical Background**

Taiwanese investment on the mainland has been driven by a mix of economic shocks and changes in governmental policies. An early and fundamental enabler for investment occurred in 1978, when Deng Xiaoping initiated China's opening to trade and investment with capitalist economies. By the early 1980s, the PRC had opened four special economic zones (SEZs) on the southeast coast to foreign investment, including one at Xiamen in Fujian Province, directly opposite the Taiwan Straits from Taiwan. Over the years, the PRC gradually opened more cities and counties to foreign investment, both on the coast and inland.

Investment from Taiwan initially was minimal because the ROC government tightly controlled the flow of capital out of Taiwan and continued to ban investment on the mainland.<sup>1</sup> However, both political and economic events combined to accelerate investment after 1987. In July 1987, the ROC relaxed its capital controls, permitting individuals to transfer overseas up to \$5 million each year without special approval.<sup>2</sup> Then, in November 1987, the ROC relaxed its ban on travel to the mainland, permitting many Taiwanese to visit their relatives.<sup>3</sup> While the ROC still prohibited mainland investment, the relaxation of restrictions on capital transfers and mainland visits made it much easier to invest on the mainland illegally. At the same time, economic pressures resulting from Taiwan's huge trade surplus and appreciating currency were precipitating a general surge in outward direct investment.<sup>4</sup>

On the mainland, the PRC continued to encourage investment from Taiwan. In 1986, for example, it published Priorities for Promoting Taiwan Business Investing in Mainland Economic Zones. In July 1988, it promulgated the Regulations Encouraging Taiwan Compatriots to Invest on the Mainland. These regulations provided for preferential treatment of Taiwanese investors relative to foreigners and overseas Chinese. Some preferences were introduced first in Fujian and then copied by other localities.<sup>5</sup>

Taiwanese investment on the mainland surged after 1987, to the point that the ROC was compelled to legalize it in order to maintain some degree of control. Businessmen moved capital legally or illegally to third areas such as Hong Kong, Singapore, and the United States and then invested in the mainland using other companies, disguised subsidiaries, or false names. It was impractical for the ROC to track the many relatively

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<sup>1</sup> The first Taiwanese investment on the mainland was reportedly made in 1981. Through 1987, mainland sources estimated cumulative Taiwanese investment at \$100 million for 80 projects. See Xu (1994), 146.

<sup>2</sup> See Clough (1993), 46.

<sup>3</sup> The ROC continued to ban direct travel between Taiwan and the mainland, so travel had to be indirect, via third areas such as Hong Kong. Until July 1987, the ROC had also restricted travel to Hong Kong to deter travelers from crossing into the mainland. An estimated 5,000 to 10,000 Taiwanese nevertheless visited the mainland each year. See Wu (1994), 164–66.

<sup>4</sup> The trade and current account balances reached \$20.2 billion and \$18.0 billion in 1987, while the currency appreciated by 20 percent. See Asian Development Bank, *Key Indicators of Developing Asian and Pacific Countries* (1994), 307.

<sup>5</sup> According to Wu Yu-Shan (1995), 118, special treatment included “tax holidays, duty-free imports, land use rights, transfer and inheritance of properties, permission to purchase bonds, and special areas designated exclusively for Taiwanese investments.” In 1989, Taiwanese were assured that they would continue to receive more preferential terms than those granted to foreign investors. See Hickey (1991), 519; Ding (1995), 46; and Yin and Yen (1992), 57.

small projects. But the government was forced to engage in some rather public arm-twisting to dissuade the Formosa Plastics Group from a proposed but illegal \$7 billion investment in a naphtha cracker on the mainland.<sup>6</sup> On October 6, 1990, the ROC legalized indirect investment, permitting Taiwanese capital to flow to the mainland through companies or subsidiaries located in third areas.<sup>7</sup>

The ROC initially authorized investments for the manufacture of some 3,319 types of products.<sup>8</sup> As the investment regulations evolved, the number of authorized types expanded somewhat, additional items were sometimes allowed on a case-by-case basis, and others remained prohibited—for example, items relating to national defense, high technology, government-supported R&D, or overall economic strength and security.<sup>9</sup>

To make these regulations effective, the ROC required businessmen to obtain prior approval from the Ministry of Economic Affairs (MOEA) for proposed projects exceeding \$1 million.<sup>10</sup> In addition, all projects were supposed to be registered with the MOEA.<sup>11</sup> The government offered to exempt existing mainland projects from prosecution if they were registered immediately with the MOEA. Further, in March 1991, the ROC announced that mainland investments would be exempt from income taxes and increased the number of eligible product types to 3,679.<sup>12</sup> By April 1991, some 2,503 firms had registered \$754 million in mainland investments; the amount approved by the PRC already exceeded \$2 billion.<sup>13</sup> By early 1993, some 2,700 projects had been registered with the ROC

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<sup>6</sup> See Hickey (1991), 520.

<sup>7</sup> The ROC relaxed this constraint slightly in November 1992, permitting investments of less than \$1 million to be made via indirect remittance of funds rather than through subsidiaries or other companies. By 1993, an estimated 4,000 Taiwan-invested companies had been established in Hong Kong to facilitate trade and investment with the mainland. Some 1,500 of these were said to be paper companies without real operations. See Xu (1994), 146, and Tung (1994), 155. Companies in third areas are considered to be Taiwanese if Taiwanese interests hold over 20 percent of their shares or a seat on their board of directors. See *Free China Journal* (Economy), May 31, 1996, 202.

<sup>8</sup> This list of mainly low-technology items included almost half of the potential categories. See Yin and Yen (1992), 57, and Sung (1995), 22.

<sup>9</sup> See Yeh (1995), 64.

<sup>10</sup> See Central News Agency, February 8, 1996, 68.

<sup>11</sup> The Statutes Governing Relations between the People of Taiwan and Mainland Areas, effective July 16, 1992, require that mainland investments be registered, with fines of up to \$22,000 for failure to comply. Unregistered projects may be ordered terminated. See Tung (1994), 156, and Luo and Howe (1995), 111.

<sup>12</sup> These moves supported the ROC's efforts to reduce incentives for businessmen to hide their mainland investments. See Peng (1993–1994), 50.

<sup>13</sup> See Chen Pochih (1994), 82–83.

government, although an estimated 6,000 to 7,000 projects existed.<sup>14</sup> After another push by ROC authorities to get existing projects registered, the MOEA tallied some 9,100 projects as of June 1993. At least 2,000 more were estimated to have avoided registration in order to evade taxes.<sup>15</sup>

It is thus clear both that investment on the mainland grew rapidly after 1987 and that the ROC government has had a difficult time tracking and controlling that investment. Incentives for investors to avoid registering their projects may include tax evasion and investment in unauthorized types of projects, as well as a general aversion to bureaucratic red tape and related delays.

## **2. Investment Volume**

This section presents estimates of the amount of Taiwanese investment on the mainland, based mainly on PRC statistics. For the reasons discussed above, the ROC count understates the amount of Taiwanese investment. The PRC count should be more accurate since the PRC is in a better position to monitor projects as they are authorized and implemented. Even so, the PRC's ability to identify which projects are Taiwanese is limited.<sup>16</sup> The estimates presented here should thus be viewed with caution.

Table II-1 summarizes PRC estimates of incoming foreign direct investment (FDI) from all sources and from Taiwan. Through the end of 1994, the mainland had approved over 200,000 incoming FDI projects valued in excess of \$300 billion, from all sources. More than \$95 billion of the approved investment had already been implemented by then. Of the remainder, some will be implemented in future years, some will not. Of particular interest is the dramatic increase in FDI during the 1992–1994 period. Those three years account for some 83 percent of cumulative approved FDI, and 76 percent of actual FDI, even though the PRC has encouraged FDI since 1978. This phenomenal surge was triggered, in part, by Deng Xiaoping's reaffirmation of economic reforms and markets during a trip to southern China in early 1992.<sup>17</sup>

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<sup>14</sup> See Jones et al. (1993), 126.

<sup>15</sup> See Tung (1994), 156.

<sup>16</sup> Some investors from the mainland and elsewhere claim to be Taiwanese in order to obtain preferential treatment. On the other hand, some amount of the investment apparently from Hong Kong, Singapore, and elsewhere is by companies whose Taiwanese ownership is not recognized. See Chen Pochih (1994), 82, and Fu (1993–1994), 55.

<sup>17</sup> The exchange rate between the Chinese currency and the U.S. dollar was relatively stable during the 1992–1994 period. The surge in inward FDI was real.

**Table II-1. Mainland China's Incoming Foreign Direct Investment**

Year	From All Sources			From Taiwan			Taiwan Share (%) of Approved FDI
	Actual	Approved		Actual	Approved		
	\$M	Projects	\$M	\$M	Projects	\$M	
Pre-1991	11,691	13,260	32,758	411	2,065	2,027	6.2
1991	11,600	13,086	19,583	500	1,735	1,400	7.1
1992	11,008	48,764	58,124	1,051	6,430	5,543	9.5
1993	27,515	83,437	111,436	3,139	10,948	9,965	8.9
1994	<u>33,767</u>	<u>47,549</u>	<u>82,680</u>	<u>3,391</u>	<u>6,247</u>	<u>5,395</u>	6.5
Total	95,580	206,096	304,580	8,491	27,425	24,330	8.0

Source: *Almanac of China's Foreign Economic Relations and Trade* (1993-95) and Schive (1995).

Table II-1 also indicates the portion of the mainland's FDI that originated from Taiwanese investors. Before 1991, despite prohibition by the ROC government, the PRC approved some \$2 billion in Taiwanese FDI. Taiwanese investment surged even more sharply than the mainland's total FDI during 1992-1994, with those three years accounting for 86 percent of PRC-approved and 89 percent of actual cumulative investment from Taiwan. In Taiwan's case, the strength of the surge may, in part, reflect the legalization of selected indirect investments at the end of 1990. While much has been written about the pre-1992 characteristics of Taiwanese FDI, it is the sometimes different characteristics of the subsequent surge that now dominate.

Table II-1 suggests that Taiwanese investment is an important component of the mainland's total FDI. However, with only 8 percent of cumulative approved FDI, Taiwanese investors clearly do not dominate the process. To show this more clearly, Table II-2 focuses on the mainland's major sources of FDI during the 1992-1994 period. Investment from Hong Kong clearly dominates, with 63.8 percent of the mainland's total FDI. While Taiwan's 8.3 percent share is the second largest, the shares from the U.S., the European Union, and Japan are also significant.

**Table II-2. Mainland's Incoming FDI from Selected Sources  
(Millions of Dollars)**

Years	All Sources	Hong Kong	Taiwan	US	EU	Japan
1992	58,124	40,044	5,543	3,121	964	2,173
1993	111,436	73,939	9,965	6,813	3,182	2,960
1994	<u>82,680</u>	<u>46,971</u>	<u>5,395</u>	<u>6,010</u>	<u>5,630</u>	<u>4,440</u>
Total	252,239	160,954	20,903	15,944	9,775	9,573
% Share	100.0	63.8	8.3	6.3	3.9	3.8

Hong Kong's purported 63.8 percent share may be an overestimate, however. Hong Kong is a major financial center that serves as a convenient point from which to do business on the mainland. It is used to funnel investment funds into the mainland from overseas Chinese in Southeast Asia as well as from Americans, Britains, Japanese, and Taiwanese. Moreover, a substantial amount of mainland capital is moved to Hong Kong and then transferred back as FDI, for example, to qualify for preferential treatment. A 63.8 percent share thus overstates the amount of "indigenous" Hong Kong capital invested on the mainland. Still, there is no doubt that Hong Kong's manufacturing sector has moved en masse to southern China, Hong Kong residents commute daily to manage their mainland factories, and Hong Kong tycoons are developing highways, power plants, and real estate throughout the mainland. Hong Kong thus makes a dominant contribution, even if its share is somewhat less than the statistics suggest.

No one knows the true share of Taiwanese investors in mainland FDI. One researcher at Taiwan's Chung Hua Institute for Economic Research suspects that perhaps 30 percent of the mainland FDI attributed to Hong Kong and Macao is in fact Taiwanese.<sup>18</sup> If true, Hong Kong's share in Table II-2 would drop to 45 percent and Taiwan's share would increase to 27 percent, making Taiwanese FDI significantly more important to the PRC.<sup>19</sup>

### 3. Location of Investment

Taiwanese investment on the mainland was initially concentrated in the southern coastal provinces of Fujian and Guangdong (see Figure I-1 for a map of the mainland and Taiwan). One source using PRC statistics estimated that 85 percent of Taiwanese investment through 1991 was concentrated on the southern coast, with 47 percent in Fujian and 38 percent in Guangdong.<sup>20</sup> The ROC's own tally as of April 1991 indicated 69 percent in the south, with 24 percent in Fujian and 46 percent in Guangdong.<sup>21</sup>

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<sup>18</sup> This suspicion is attributed to Kao Chang in Central News Agency, June 17, 1996, and *Taiwan Economic Daily News*, June 17, 1996, 442.

<sup>19</sup> The ROC would gain little leverage from a 27 percent share if the PRC in fact believes the share is only 8.3 percent.

<sup>20</sup> See Xu (1994), 146. The choice of Fujian as an investment destination is an easy one since most residents of Taiwan are descendents of Fujian residents and the two areas share a common local dialect.

<sup>21</sup> See Ash and Kueh (1995), 83.

However, as indicated in Table II-3, the investment surge that began in 1992 emphatically dispersed Taiwanese FDI, shifting it northward along the coast.<sup>22</sup> Less than 30 percent of Taiwan's approved investment was destined for Fujian and Guangdong (and the island province of Hainan, southeast of Guangdong). Almost 59 percent was to be located around Shanghai or further north along the coast.<sup>23</sup> Interestingly, the Taiwanese sent more investment to the generally neglected inland provinces than to Guangdong and Hainan. The geographic pattern of Taiwan's investment has thus changed dramatically.<sup>24</sup> As will be discussed below, the change in patterns reflects a greater emphasis on investing to serve mainland rather than export markets as well as a shift toward investment in real estate and other services.

**Table II-3. Regional Distribution of Taiwan's FDI in China (1992-1994)  
(Percent)**

Region	Region's Share of Taiwan's FDI	Taiwan's Share of Region's FDI
Guangdong-Hainan	13.1	3.2
Fujian	16.8	13.6
Shanghai-Jiangsu-Zhejiang	34.5	12.4
Northern Coastal	21.3	8.6
Inland	<u>14.3</u>	<u>7.8</u>
Total/Average	100.0	8.0

Source: *Almanac of China's Foreign Economic Relations and Trade* (1993-95).

Table II-3 also shows, for each region, the Taiwanese share of total FDI from all sources. The data suggest that Taiwanese investors have their greatest relative importance in Fujian, with 13.6 percent of incoming FDI, and in Shanghai-Jiangsu-Zhejiang, with 12.4 percent. The Taiwanese share in the Xiamen special economic zone within Fujian is somewhat larger at 17.1 percent. Such shares give Taiwanese investors some

<sup>22</sup> From south to north, the coastal provinces and autonomous cities north of Fujian include Zhejiang, Shanghai, Jiangsu, Shandong, Hebei, Tianjin, Beijing, and Liaoning.

<sup>23</sup> In a 1992 survey of Taiwan's large firms, 44 percent identified Shanghai as their preferred location for mainland investment, aiming particularly at penetrating the mainland's domestic market. See Tung (1994), 159.

<sup>24</sup> Since 1992-1994 accounts for 86 percent of Taiwan's cumulative investment, including earlier investment would not materially change the pattern in Table II-3. Earlier data can be included by assuming that pre-1992 investment followed the locational pattern of the ROC's April 1991 tally. Under that assumption, investment in Fujian and Guangdong amounts to 35.6 percent of cumulative Taiwanese investment through 1994.



degree of influence with local governments. In Guangdong-Hainan, with only 3.2 percent of FDI, the Taiwanese clearly must stand in line behind their compatriots from Hong Kong.

#### 4. Size of Investment

The average size of Taiwanese investment projects is relatively small. As Table II-4 shows, an average of \$920,000 was invested in each Taiwanese project during the 1992–1994 period. This contrasts with an average of \$1.4 million for projects from all sources. In part, the small size of Taiwanese projects reflects the involvement of many small- and medium-sized Taiwanese firms. Many of these use the mainland for the assembly of imported materials, which often does not require a large capital investment. Some firms have transferred used production equipment to the mainland. In general, limiting project size is a way of hedging against the economic and political risks of investing on the mainland.

**Table II-4. Average Size of China's Incoming FDI Projects (1992–1994)**

Region	\$M per Project	
	All Sources	Taiwan
Guangdong-Hainan	1.95	1.30
Fujian	2.29	1.43
Shanghai-Jiangsu-Zhejiang	1.34	0.88
Northern Coastal	1.14	0.76
Inland	0.92	0.71
All regions	1.40	0.92

Source: *Almanac of China's Foreign Economic Relations and Trade* (1993–95).

Table II-4 indicates that Taiwanese projects are smaller not just for the mainland as a whole but also for each of the regional groupings shown. Taiwanese projects are smaller than those from other sources whether they are located on the southern coast, the northern coast, or inland. Note also that projects from both Taiwanese and other sources tend to be larger in Guangdong and Fujian. This tendency was true before 1992 as well.<sup>25</sup>

<sup>25</sup> For example, prior to 1992, but excluding 1989 because of poor data, average Taiwanese project size was \$1.24 million in Guangdong, \$1.13 million in Fujian, and \$0.73 million in the mainland as a whole. See Xu (1994), 146.

ROC regulations probably explain much of the tendency for Taiwanese projects to be smaller than those of other mainland investors. As noted above, projects that exceed \$1 million must obtain prior approval from the ROC government. Larger projects are thus more likely to be blocked than smaller ones. Further, to avoid government oversight, and also to qualify for investing via indirect remittance rather than through a third-area company, investors may deliberately limit project value to less than \$1 million, perhaps by dividing large projects into several smaller ones.

ROC regulations on the types of products in which investment is permitted also tend to discriminate against larger projects. The regulations generally permit the transfer to the mainland of labor-intensive operations that are no longer viable in Taiwan because of high wage costs. These tend to require relatively small capital investments. The regulations are much more restrictive on the transfer of heavy and high-technology industries, which are more likely to generate large, capital-intensive projects. Restrictions on heavy industries are doubly effective because many of them are dominated in Taiwan by state-owned enterprises (SOEs), which are not permitted to contract with or invest in the mainland.<sup>26</sup>

To some extent, ROC regulators seem to focus on investment size per se. Probably the most notorious cases have involved the Formosa Plastics Group (FPG), Taiwan's largest privately owned conglomerate. In January 1990, when investment on the mainland was still illegal, FPG was reported to be planning a \$7 billion petrochemical complex on Haicang Island near Xiamen to serve Taiwanese customers on the mainland.<sup>27</sup> The ROC government objected strongly, in part because FPG's move might trigger a stampede of investment by giving others greater confidence in the safety of mainland projects. Further, if the ROC allowed FPG to make such a huge investment, others might conclude that ROC regulators no longer objected to large projects. Such signals of government attitudes are closely watched by large companies, which depend greatly on the good will of the ROC

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<sup>26</sup> Large SOEs, for example, dominate electric power, sugar refining, oil and gas, shipbuilding, and, until recently, steel. The ban on direct contact between SOEs and the mainland has loosened somewhat recently. For example, in July 1996, the mainland's China National Offshore Oil Corporation (CNOOC) and Taiwan's Chinese Petroleum Corporation (CPC) signed the first cooperative agreement between mainland and Taiwanese SOEs, for joint oil and gas exploration off the mainland coast near the mouth of the Pearl River. However, in order to conform to the ROC's rules, the agreement was signed on the Taiwan side by Overseas Petroleum Investment Company, a CPC affiliate. See Central News Agency, July 18, 1996, 284.

<sup>27</sup> The resolution of FPG's 1990 proposal is described in Clough (1993), 48-49.

government.<sup>28</sup> In the end, the ROC provided inducements for FPG to build a huge complex in Taiwan, and the Haicang project was delayed and apparently abandoned.<sup>29</sup>

In May 1996, FPG proposed another huge project, this time a \$3.8 billion, 3.6-megawatt power plant in Zhangzhou, Fujian.<sup>30</sup> As part of the project, FPG would build a harbor to receive the requisite coal. To appreciate the drama in this proposal, note that the largest existing Taiwanese project size is said to be \$173 million. The power project would be a good one for FPG because Fujian Province would buy all the resulting power at premium prices as well as provide 137 hectares of land and other incentives. The interagency ROC task force that reviewed FPG's application had considerable difficulty reaching a decision, even though the project seems to comply with ROC regulations. For example, it includes no advanced technology and does not negatively impact Taiwan's economy.<sup>31</sup> Moreover, FPG has structured the financing such that only \$420 million would be contributed by Taiwan-based companies.<sup>32</sup>

The task force is nevertheless reluctant to approve such a huge project because of its psychological impact on local business groups, possibly triggering a wave of investments. Indeed, FPG's Nam Ya Plastics Corporation subsidiary reportedly has plans to move one-third of its petrochemical plants to the mainland. FPG itself is said to have ambitions to build a \$10 billion, 13-megawatt power plant in coal-rich Shanxi Province. However, FPG withdrew its application for ROC approval on August 16, 1996, following President Lee Teng-hui's speech warning businessmen against overdependence on the mainland.<sup>33</sup>

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<sup>28</sup> This point is made in Huan (1993), 432, and Clough (1993), 49. The government influenced or controlled loans, foreign exchange transactions, licenses, and the availability of land for expansion.

<sup>29</sup> In November 1992, FPG announced it was abandoning the Haicang project and might instead build a different project on the Yangtze River near Shanghai. See Tung (1994), 158.

<sup>30</sup> See Central News Agency, May 28, 1996, 483-84; June 12, 1996, 177; and August 13, 1996, 197-98. See also *Free China Journal (Economy)*, May 31, 1996, 202-3.

<sup>31</sup> The ROC has prohibited companies that produce power in Taiwan from producing power on the mainland, but it may permit other companies to do so on a case-by-case basis. FPG does not produce power on Taiwan. See *Free China Journal (Economy)*, May 31, 1996, 202-3.

<sup>32</sup> Three FPG companies in Taiwan would each contribute \$140 million, FPG's U.S. affiliates would fund a combined total of \$280 million, and an international syndicate would provide a \$2.3 billion loan for the remainder. See Central News Agency, August 13, 1996, 198. There may be some political advantage for FPG in minimizing the direct contribution of the Taiwan subsidiaries, although the actions of the entire group matter more from an economic perspective.

<sup>33</sup> In particular, Lee suggested that limits on the extent of FDI should be studied. For example, limits might be established for a company's ratio of mainland to domestic investment, for Taiwan's overall ratio of mainland to total FDI, and for Taiwan's ratio of FDI to domestic investment. See Central News Agency, August 16, 1996, 265, and *Free China Journal (Economy)*, August 16, 1996, 267-68.

While the ROC is reluctant to approve large mainland projects, sizable investments nevertheless occur. President Enterprises Food Company, one of Taiwan's three largest companies, has invested some \$350 million since 1992 in 22 mainland enterprises and plans to invest \$100 million in a new company in Guangzhou, Guangdong.<sup>34</sup> The Ting Hsin International Group, originally from Taiwan, reportedly invested some \$1 billion on the mainland between 1988 and 1992.<sup>35</sup> Ting Hsin, which has now formed Tingyi Holding Corporation in the Cayman Islands, produces Master Kang instant noodles, vegetable oil, soft drinks, cakes, and packaging materials on the mainland. The holding company is listed on the Hong Kong Stock Exchange.<sup>36</sup>

## 5. Sectoral Distribution of FDI

Taiwanese investment on the mainland has evolved as PRC and ROC regulations have shifted. Initially, projects were generally export oriented, low technology, and labor intensive. Beginning especially in 1992, PRC regulations relaxed to permit more investments aimed at serving the domestic mainland market, including services such as real estate. Taiwanese investment evolved accordingly. ROC regulations have partially accommodated the new opportunities, permitting more capital-intensive and medium-technology projects. ROC regulations nevertheless continue to block many capital-intensive and high-technology projects.

The first wave of Taiwanese investment was aimed at extending the life of labor-intensive export industries that could no longer produce competitively in Taiwan. After 1987, labor shortages, rising wages, and an appreciating currency at home drove these industries to seek lower labor and land costs on the mainland and elsewhere. Industries that substantially relocated to the mainland include shoes, suitcases, bicycles, and tennis rackets, balls, and apparel.<sup>37</sup> In some cases, suppliers to these industries moved as well.

A good example is the shoe industry. In the 1980s, Taiwan was a leading exporter of shoes. By 1990, however, high costs had reduced the number of plastic footwear

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<sup>34</sup> See *China Daily*, July 7, 1996. Taiwan's Central News Agency, August 14, 1996, 223, in contrast, reports that President has invested \$120 million in 14 companies on the mainland and is planning a \$100 million investment in power generation in Wuhan.

<sup>35</sup> See *China Daily*, July 28, 1996.

<sup>36</sup> Listing mainland affiliates in Hong Kong enables parents to finance mainland operations without being subject to ROC controls on FDI. Several Taiwanese parents have done this already, and in early 1997 Chung Shing Textile will become the first parent listed on the Taiwan Stock Exchange to list its mainland affiliate in Hong Kong. See Central News Agency, August 19, 1996, 303.

factories in Taiwan to 700, from a peak of 1,400.<sup>38</sup> Much of the lost production was shifted to the mainland, where Taiwanese established as many as 700 footwear factories.<sup>39</sup> In 1990, shoe manufacturers reportedly accounted for one-third of contracted Taiwanese investment on the mainland. Supplies of leather and other materials were exported from Taiwan to the mainland factories. Some 92 percent of the shoes manufactured on the mainland were exported. In the meantime, remaining factories in Taiwan survived by automating, upgrading their products, and importing low-cost uppers and soles from their mainland factories.<sup>40</sup>

Beginning particularly in 1992, the pattern of Taiwanese investment shifted as the mainland began opening more of its domestic market to products made by foreign-invested factories. This partial opening attracted manufacturers of more types of products and caused the location of projects to shift northward. The mainland also opened increasingly to foreign investments in infrastructure, commerce, and real estate.<sup>41</sup> Taiwanese invested strongly in real estate, including offices, hotels, housing, resorts, industrial parks, shopping centers, and urban renewal projects.<sup>42</sup>

Table II-5 summarizes the distribution of Taiwanese investment among industrial sectors. Note that this table is based on ROC estimates of mainland investment which are considerably lower than the PRC estimates discussed above. Of the sectors shown, only food and beverages and chemicals seem clearly targeted at the mainland market, with chemicals probably supplying materials for Taiwan-invested mainland factories.<sup>43</sup> For the first six months of 1996, investment in the electronics sector continues to grow, although

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<sup>37</sup> See Peng (1993–1994), 51.

<sup>38</sup> See Luo and Howe (1995), 102.

<sup>39</sup> The number of factories has been estimated at 200 in Clough (1993), 57; at 500 in Mark (1994), A17; and at 700 in Peng (1993–1994), 51–52. Footwear factories have also been established in Southeast Asia.

<sup>40</sup> For example, Nike's premium Air Jordan shoes are reportedly made in Taiwan itself, by workers earning almost double the average Taiwanese wage. See Central News Agency, June 7, 1996, 106.

<sup>41</sup> Selected areas permitted foreign investment in real estate even before the 1990s, e.g., some municipalities in the Pearl River delta. See Wang (1994), 164.

<sup>42</sup> See Xu (1994), 147, 149. In 1992 and 1993, Taiwanese newspapers were full of advertisements for mainland property projects, at least until the PRC began its austerity program to combat inflation in June 1993. See Mark (1994), A17.

<sup>43</sup> Luo and Howe (1995), 102, notes that a number of downstream petrochemical plants followed their Taiwanese customers to the mainland.

the transport sector and the basic metal products sector grew much faster.<sup>44</sup> The food and beverage sector declined 8 percent relative to the first half of 1995.

**Table II-5. Taiwanese FDI on Mainland by Sector (1991–October 1994)**

Sector	No. of Projects	Sector Invst. (\$M)	Share (%)	Avg./ Proj. (\$M)
Electronic and electrical products	1,395	652	14.8	0.468
Plastics	1,162	506	11.5	0.435
Food and beverage	910	522	11.8	0.574
Precision instruments	1,298	353	8.0	0.272
Base metal products	868	351	8.0	0.405
Textiles	536	256	5.8	0.478
Chemicals	701	254	5.8	0.363
Non-metallic and mineral products	460	263	6.0	0.572
Lumber and bamboo products	473	180	4.1	0.381
Rubber products	199	180	4.1	0.904
Other	<u>2,648</u>	<u>887</u>	<u>20.1</u>	0.335
Total	10,650	4,405	100.0	0.414

Source: Schive (1995), 99.

## **B. OTHER OUTWARD FDI**

### **1. Investment Volume**

Taiwanese investment on the mainland was part of a general outflow of capital from the island, prompted by a need to restructure away from labor-intensive industries as well as by the availability of surplus domestic savings. Indeed, outflows to Southeast Asia and the U.S. were well underway before mainland investment surged. This section describes these other outflows.

Table II-6 shows the global distribution of cumulative outward direct investment other than that to the mainland. The two major destinations for Taiwanese investment have been the Americas, meaning the United States, and Asia, meaning Southeast Asia. These

<sup>44</sup> See *Free China Journal (Business)*, July 19, 1996, 157–58.

statistics, compiled by the ROC government, substantially understate the amount of investment approved by host governments in Southeast Asia as will be shown below.<sup>45</sup>

**Table II-6. Taiwan's Outward FDI (1952-1993)**

Destination	\$M	Share (%)
Americas	3,692	50.7
Asia (excluding PRC)	3,041	41.8
Europe	477	6.6
Africa	48	0.7
Oceania	<u>22</u>	<u>0.3</u>
Total	7,280	100.0

Source: Schive (1995), 71.

Table II-7 indicates that outward FDI grew strongly after 1987. Investment in the Americas was particularly dominant in the early years, averaging more than twice as much as FDI to Asia through 1989. Thereafter, FDI to Asia surged, averaging roughly the same amount as FDI to the Americas through 1993.

**Table II-7. Taiwan's FDI to Asia and the Americas**

Year	Value (\$M)		Ratio of Americas to Asia
	Asia <sup>a</sup>	Americas	
pre-1987	88	171	1.94
1987	21	80	3.77
1988	69	130	1.88
1989	296	624	2.11
1990	603	839	1.39
1991	930	659	0.71
1992	370	449	1.21
1993	<u>664</u>	<u>740</u>	1.11
Total	3,041	3,692	1.21

<sup>a</sup>Excludes mainland.

Source: Schive (1995), 71.

Table II-8 provides a similar comparison of Taiwanese FDI in Southeast Asia and the mainland. Note that this comparison is based on statistics collected by the host

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<sup>45</sup> If ROC statistics are more accurate for investment in the Americas than in Asia, the relative share for the Americas may be overstated in Table II-6. For example, capital flows to the United States may be more transparent, making it more difficult for Taiwanese to hide U.S. investments from the ROC government.

governments and the values reported for Southeast Asia are much higher than the values for Asia presented above.<sup>46</sup> Here, it is clear that FDI to both Southeast Asia and the mainland surged in 1988. Investment to Southeast Asia dominated at first, averaging more than three times as much as FDI to the mainland through 1991. Thereafter, the pattern was reversed dramatically, with FDI to the mainland averaging almost five times as much as that to Southeast Asia in 1992 and 1993.

**Table II-8. Taiwan's FDI to SE Asia and the Mainland**

Year	Value (\$M)		Ratio of Mainland to SE Asia
	SE Asia	Mainland	
pre-1987	867		
1987	416	106	0.25
1988	2,196	420	0.19
1989	2,015	517	0.26
1990	4,032	984	0.24
1991	3,447	1,400	0.41
1992	1,996	5,543	2.78
1993	<u>1,135</u>	<u>9,965</u>	8.78
Total	16,106	18,935	1.18

Source: Schive (1995), 72-76.

As noted above, initial Taiwanese FDI on the mainland focused on production for export. The dramatic surge beginning in 1992 occurred largely because the PRC opened more of its potentially huge domestic market to foreign investors. While much of Taiwanese investment in Southeast Asia was also aimed at export markets, the investment climate was better there, with sounder infrastructure and lower economic and political risks. This encouraged larger investments, as shown in Table II-9. Through 1993, the average FDI project value was \$4.7 million in Southeast Asia but barely \$900,000 on the mainland. The only exception to this pattern was the Philippines, where severe political and economic risks held the average project size to barely \$600,000.

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<sup>46</sup> While FDI to Southeast Asia is not subject to the same restrictions as the mainland, some investors still hesitate to report their projects for tax reasons or to avoid bureaucratic delays. Also, the capital to be invested is sometimes obtained outside Taiwan.



**Table II-9. Average Size of Taiwan's FDI in SE Asia  
(Cumulative through 1993)**

Host Country	\$M per Project
Indonesia	13.50
Vietnam	13.09
Malaysia	5.13
Thailand	4.10
Singapore	1.45
Philippines	0.64
Average	4.76
Mainland	0.92

Source: Schive (1995), 72-76.

## 2. Sectoral Distribution of FDI

The business sectors in which Taiwanese have invested are shown in Table II-10, which again is based on ROC data. The banking and insurance sector dominates with 25.4 percent of cumulative FDI.<sup>47</sup> Other "soft" sectors with substantial investment include trade and services. Among the export-oriented manufacturing sectors, the electronic and electric appliances sector dominates. While much has been said about the exodus from Taiwan of sunset industries such as rubber products, lumber and bamboo products, garments and footwear, and leather and fur products, the FDI value for these labor-intensive sectors is minimal.<sup>48</sup>

Table II-10 also includes sectoral data for Asia and the Americas. While FDI estimates shown for "all hosts" represent cumulative investment during the years up to and including 1993, data for Asia and the Americas reflect only FDI during 1993. The data nevertheless suggest certain plausible patterns. FDI for the Americas is predominately soft investment, with 47.9 percent of the total invested in banking and insurance, trade, and services. The principal exception is chemicals, reflecting FPG's petrochemical complexes and 10 subsidiaries in the United States. The Taiwanese have also made a number of

<sup>47</sup> While FDI is substantial for the banking and insurance sector, the ROC prohibits banking FDI on the mainland, partially accounting for the the small average size of Taiwanese FDI there. Note also that the sector includes investment holding companies, which may be established for the purpose of facilitating manufacturing investments. See *Free China Journal (Economy)*, May 17, 1996, 190, and *Free China Journal (Business)*, July 19, 1996, 157.

<sup>48</sup> Taiwanese industries in which at least 40 percent of the companies have built overseas factories include plastics, rubber products, shoes, hats, umbrellas, and feather products. Industries with at least 30 percent of companies investing overseas include electronics, leather goods, toys, and entertainment products. Employment in Taiwan by such labor-intensive industries dropped by 120,000 in the past five years. See *Free China Journal (Business)*, December 29, 1995, 54, and *Taiwan Economic Daily News*, July 16, 1996, 584.

investments in Silicon Valley to stay in touch with developments and gain access to technologies.<sup>49</sup> In contrast, Taiwanese FDI in Asia (mainly the Southeast) is distributed more widely among manufacturing sectors, to support exports as well as feed export-oriented factories.

**Table II-10. Sectoral Distribution of Taiwan's Outward FDI**

Sector	Share of Total (%)		
	1952-93	1993	
	All Hosts	Asia	Americas
Banking and insurance	25.4	23.4	40.0
Electronic and electric appliances	16.0	9.4	2.6
Chemicals	14.1	5.2	37.3
Trade	8.7	12.6	5.7
Services	8.1	0.9	2.2
Base metals and metal products	6.6	2.7	0.3
Textiles	4.4	13.0	0.0
Non-metallic minerals	3.2	3.5	0.1
Paper products and printing	3.0	16.6	0.1
Food and beverage processing	2.9	2.2	0.0
Rubber products	2.0	0.0	0.0
Transportation	1.0	2.1	1.4
Lumber and bamboo products	0.7	0.4	1.5
Machinery equipment	0.4	0.2	0.0
Garments and footwear	0.3	1.3	0.0
Leather and fur products	0.1	0.1	0.0
Other	3.2	6.5	8.9
Total	100.0	100.0	100.0

Note: Mainland is excluded.

Source: Schive (1995), 70-78.

### 3. Geographical Diversification

Because of concerns about overdependence on the mainland, the ROC government has attempted to divert outward FDI to other destinations. In 1993, the ROC initiated its southern investment strategy to shift more FDI to Southeast Asia. The strategy included vacation diplomacy, with President Lee Teng-hui and Premier Lien Chan visiting the region

<sup>49</sup> Simon (1994), 201, for example, reports that Taiwan's UMC acquired a 49.7 percent share of Meridian Semiconductor in California in order to acquire 486-clone microprocessor technology. Taiwan Semiconductor is building an 8-inch wafer plant in Washington state, while six Taiwanese companies have established a joint venture with ACC Micro System, a U.S. semiconductor model maker, to build a similar wafer plant in California. See Central News Agency, April 24, 1996, 246.

and holding unofficial talks with its leaders. By April 1996, Taiwan had signed investment protection agreements with Indonesia, Malaysia, the Philippines, Singapore, and Vietnam and planned to sign one with Thailand.<sup>50</sup> The ROC strategy also includes opening local trade centers and supporting the development of industrial parks to attract Taiwanese investors to the region.<sup>51</sup>

Over the years, Taiwanese investors have become a major presence in Southeast Asia, thanks mainly to economic circumstances.<sup>52</sup> Recent estimates based on host nation approvals suggest that, approaching mid-1996, cumulative FDI had reached some \$28.8 billion in Southeast Asia versus \$28.3 billion on the mainland.<sup>53</sup> Since cumulative FDI as of 1993 is estimated at \$16.1 billion and \$18.9 billion for the respective destinations, it seems that FDI has been roughly balanced between them for the last two years.<sup>54</sup>

ROC policy is not to encourage outward FDI, but to assist investors and promote diversification to Southeast Asia, Europe, and Latin America.<sup>55</sup> Taiwanese investors have thus established footholds in many regions. Fourteen Taiwanese companies have invested over \$500 million in factories in Britain, particularly for computer-related products. These, and a number of Taiwanese trade companies in the Netherlands, are designed to penetrate the European market. The ROC is supporting the development of industrial parks for electronics investments in Poland and the Czech Republic and will provide subsidies for Taiwanese investors there.<sup>56</sup>

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<sup>50</sup> See Central News Agency, April 29, 1996, 291.

<sup>51</sup> The ROC, for example, supports industrial parks in Ho Chi Minh City, Vietnam; Batam, Medan, and Surabaya, Indonesia; Penang, Malaysia; Laos; and Subic Bay, the Philippines. See Chen Hurng-yu (1994), 128. The first stage of the Subic Bay estate, for example, has attracted 39 Taiwanese companies. See Central News Agency, July 8, 1996, 106.

<sup>52</sup> In 1990, Taiwanese provided the first or second largest amount of FDI to Malaysia, Thailand, and the Philippines. See Clough (1993), 105. In 1995, Taiwanese FDI ranked first in Vietnam, second in Malaysia, third in the Philippines, fourth in Thailand, seventh in Indonesia, and thirteenth in Singapore. See Central News Agency, May 17, 1996, 279.

<sup>53</sup> The respective estimates, which are really only rough approximations, were reported by the ROC's Mainland Affairs Council and Ministry of Economic Affairs. See Central News Agency, May 17, 1996, 288, and June 10, 1996.

<sup>54</sup> A number of factors have tended to slow FDI to the mainland in recent years, including its anti-inflationary austerity program, investment policy changes by the PRC, the increase in cross-strait tensions, and perhaps some disillusionment on the part of Taiwanese investors.

<sup>55</sup> See *Free China Journal (Economy)*, May 24, 1996, 193, and Central News Agency, July 30, 1996, 412. The ROC seeks to keep Taiwanese industries rooted at home.

<sup>56</sup> See Central News Agency, April 13, 1996, 111.

In the Americas outside the United States, Taiwanese investors have been active in the Caribbean region and parts of South America. Caribbean investments provide a platform for exports to the U.S. as well as support some of the few countries that maintain diplomatic relations with the ROC.<sup>57</sup> In South America, the ROC is supporting the development of industrial parks aimed particularly at penetrating the Mercosur free-trade area in the south.<sup>58</sup> Taiwanese investors are also active in South Africa and India.<sup>59</sup> The Taiwanese have not been active in Australia, although their interest has grown recently.<sup>60</sup>

## C. INWARD FDI

### 1. Volume and Characteristics

Taiwan has been a steady recipient of incoming FDI for many years. FDI comprised 5.6 percent of gross manufacturing investment during 1962–1969 and 6.6 percent during 1981–1987.<sup>61</sup> Between 1989 and 1994, however, Taiwan's incoming FDI was only the 28th largest among the world's recipients.<sup>62</sup> Incoming FDI has increasingly

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<sup>57</sup> Taiwanese investment has reached \$24 million in Honduras and over \$100 million in the Dominican Republic. Over \$20 million has already been attracted to a new export processing zone the ROC is developing at Fort Davis, Panama. See Central News Agency, July 17, 1996, 257; July 21, 1996, 329; and August 15, 1996, 229.

<sup>58</sup> The ROC's export-import bank is providing some \$10 million for development of an industrial park in East City, Paraguay, near the borders with Argentina and Brazil. All three countries are members of Mercosur. Paraguay maintains diplomatic relations with the ROC, has signed an investment guarantee agreement with the ROC, hosts an ethnic Chinese community of 7,000, and offers tax incentives for investments. The industrial park is expected to attract 72 Taiwanese companies and \$150 million in FDI. Major state-owned companies from Taiwan are said to be considering investments in Paraguay, including \$27 million from China Steel for an alloy steel plant along with other investments by Taiwan Sugar and Taiwan Power. The Chinatrust Commercial Bank from Taiwan has also opened a branch in Paraguay to support Taiwanese investors. The ROC is also planning to develop an industrial park in neighboring Brazil. See Central News Agency, August 14, 1996, 215–18.

<sup>59</sup> Some 300 Taiwanese factories operate in South Africa, which is the largest country that maintains diplomatic relations with the ROC. The ROC is planning to develop an industrial park there as well. In India, which does not recognize the ROC, some 90 Taiwanese firms have invested \$200 million. See Central News Agency, May 11, 1996, 171, and *Taiwan Economic Daily News*, July 2, 1996, 527.

<sup>60</sup> Surprisingly, Taiwanese investment in Australia amounted to only \$40 million at the end of 1994. Since then, however, investments have been initiated by China Steel, Taiwan Salt Works, Taiwan Sugar, and Chung Hwa Pulp Corporation. Taiwan Power has invested some \$10 million in a coal-mining operation. An Feng Steel Co. is negotiating a joint-venture steel mill in Western Australia that could amount to \$1.2 billion. The ruling Kuomintang Party reportedly has been considering investing some \$300 million in a joint-venture railroad and land development project in northern Australia. See Central News Agency, February 15, 1996, 149, 240; May 16, 1996, 267–68; and June 4, 1996, 52.

<sup>61</sup> See Kuo (1994), 96.

<sup>62</sup> In the same tally, the mainland ranked 4th, Singapore 11th, Malaysia 13th, Japan 25th, and South Korea 33rd. See Central News Agency, July 30, 1996, 394–95.

been more important for the technology, expertise, and markets associated with it than for the amount of funding per se. The ROC is now making a serious effort to improve investment conditions and attract more FDI.

The ROC approved an estimated \$19.3 billion in inward FDI through the end of 1995. This is somewhat less than the amount invested in either the mainland or Southeast Asia, as reported above.<sup>63</sup> However, because Taiwan is a developing economy, its inward FDI naturally became significant earlier than its outward FDI. For example, inflows before 1989 account for 70 percent of cumulative inflows through 1993. The comparable statistic is 3 percent for Taiwan's FDI to the mainland and 8 percent for other FDI outflows. Furthermore, incoming FDI temporarily peaked in 1989, declining thereafter for four consecutive years as investors in search of low-cost assembly workers shied away from Taiwan's escalating wages and appreciating currency. Only in 1995 was the 1989 peak exceeded.<sup>64</sup>

**Table II-11. Inward FDI to Taiwan by Year and Source  
(Millions of Dollars)**

Year	US	Japan	Europe	Hong Kong	All Sources
pre-1989	na	na	na	na	6,076
1989	na	na	na	na	2,420
1990	na	na	na	na	1,780
1991	611	533	222	128	1,780
1992	220	421	204	213	1,460
1993	671	279	na	na	1,210
1994	295	390	244	225	1,630
1995	1,280	569	335	99	2,930
Cumulative 1991	3,880	4,200	na	630	12,056
Cumulative 1995	6,346	5,859	2,700	na	19,286

na = not available

Source: *Free China Journal (Business)*, January 19, 1996; *Almanac of China's Foreign Economic Relations and Trade*, various issues; Klintworth (1994), 202; *The Republic of China Yearbook*, 1996.

<sup>63</sup> These data are based on ROC statistics. Presumably, the ROC's data on incoming FDI are more accurate than its data on outward FDI because the government is in a better position to monitor the former. The ROC-provided measures of inward and outward investment reported in this paper may thus be inconsistent.

<sup>64</sup> Through the first six months of 1996, approved incoming FDI is \$843 million, down 16 percent from the comparable period of 1995. See Central News Agency, July 10, 1996, 150.

Table II-11 also indicates the major sources of Taiwan's incoming FDI. The greatest inflows have been from the United States and Japan, with Japan holding the cumulative lead at the end of 1991 and the U.S. leading at the end of 1995.<sup>65</sup> Europe, Hong Kong, and other overseas Chinese have also been important FDI sources.<sup>66</sup>

The average investment per project was \$3.8 million for 1992–1994. Traditionally, Japanese projects have been much smaller than U.S. projects, with project size averaging \$2.1 million for Japan and \$4.4 million for the U.S. through 1991.<sup>67</sup> However, with more than twice as many investors, the Japanese have roughly matched the U.S. in the amount invested.

Table II-12 summarizes the sectoral distribution of incoming FDI. The leading sector is clearly electronics and electric appliances, boosted by a surge in semiconductor investments in 1995–1996. The mix of inward FDI has changed from the labor-intensive assembly operations popular before the late 1980s, and now includes a higher technology mix even within the electronics and electric appliances sector.<sup>68</sup>

**Table II-12. Sectoral Distribution of Taiwan's Inward FDI**

Sector	Share (%)			
	1993	1994	1995	1996*
Electronics and electric appliances	17.9	12.9	42.3	32.2
Chemical products	8.8	6.1	13.0	na
Finance and insurance	8.0	3.1	9.0	16.8
Service	7.9	4.3	6.0	0.0
International trade	11.3	7.4	6.0	6.4
Other	<u>46.0</u>	<u>66.3</u>	<u>23.7</u>	<u>44.6</u>
Total	100.0	100.0	100.0	100.0

\*January through June only.

Source: *Free China Journal (Business)*, January 19, 1996; *Almanac of China's Foreign Economic Relations and Trade*, Various Issues.

<sup>65</sup> Japan is gaining again in 1996. Through the first six months, approved incoming FDI from the U.S., Japan, Europe, and Hong Kong in millions was \$129, \$218, \$31, and \$68, respectively.

<sup>66</sup> Overseas Chinese are ethnic Chinese living outside the mainland. FDI from Hong Kong was particularly important during the 1960s and is estimated to be one-third of the total received from overseas Chinese during 1952–1991. See Yeh (1995), 68, and Yeh (1994), 136.

<sup>67</sup> See Simon (1994), 201. This pattern was momentarily reversed in 1992 when average project size was \$3.5 million for Japan and only \$2.6 million for the United States. See *Almanac of China's Foreign Economic Relations and Trade* (1993/1994).

<sup>68</sup> Simon (1994), 200, makes this point about FDI from the U.S.

Taiwan has reputedly received a higher quality of FDI from the U.S. than from Japan.<sup>69</sup> U.S. firms have been more willing to bring in advanced technology and manufacture more sophisticated products. While Taiwanese have benefited from more than twice as many technical cooperation agreements with Japanese than with American firms, the Japanese have generally avoided transferring state-of-the-art technologies. In contrast, U.S. firms such as Hewlett Packard, NCR, Motorola, and Texas Instruments have integrated their Taiwan facilities into their global operations. This asymmetry is illustrated dramatically at Taiwan's Hsinchu Science and Industry Park, an industrial park dedicated to high-technology firms. The park is populated much more by U.S., European, and overseas Chinese firms than by Japanese plants. In the 1990s, however, Japanese companies such as Sharp, NEC, and Matsushita have begun conducting some R&D in Taiwan.

## **2. Investment Controls and Incentives**

The ROC traditionally maintained tight controls on incoming FDI. Proposed projects had to be approved in advance by the government. FDI was prohibited in many industries, as was majority foreign ownership in most cases. Foreign investors were not allowed to purchase land.

In recent years, the ROC has relaxed many of these controls and considered relaxing others. By July 1990, the ROC prohibited incoming FDI in only 54 industries and limited it in 55 more.<sup>70</sup> Continuing efforts to liberalize are as follows:

- The government is considering limiting the requirement for prior FDI approval to only those projects in which foreign ownership exceeds 20 percent.<sup>71</sup>
- Limits on the FDI ownership share have been relaxed in many cases. In July 1995, for example, ownership limits were lifted on Taiwanese insurance companies. In January 1996, new legislation permitted foreigners to own and

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<sup>69</sup> See Simon (1994), 200–4.

<sup>70</sup> See U.S. Department of Commerce (1996), 2.

<sup>71</sup> See China Economic News Service, June 15, 1996, 119.

operate telecommunications services, with a 20 percent ownership limit for common carriers and mobile services but no limit for value-added services.<sup>72</sup>

- The government reportedly is considering legislation to allow foreign investors to own and buy land and participate in real estate and land leasing and development industries.<sup>73</sup>
- In the late 1980s, the ROC began opening domestic service markets to FDI, including fast food, grocery retailing, banking, insurance, leasing, and marine shipping.<sup>74</sup>
- In 1995, the ROC began allowing limited foreign participation in oil refining, power supply, water supply, rail transport, and harbor services.<sup>75</sup>
- Other industries that may be liberalized include the production of gasoline, naphtha, natural gas, diesel fuel, and aviation fuel. Also being considered are news publishing, recording, medical technology, and remedial care industries. New legislation has been proposed to authorize more foreign participation in legal, accounting, and architectural services and to open further the transportation sector. However, FDI will remain banned in cable television and special entertainment businesses employing waitresses.<sup>76</sup>

In what could be a dramatic change, the ROC has recently considered a limited opening to FDI from the mainland. While FDI from the mainland is prohibited, it sometimes occurs under the guise of FDI from other places. In a recent case, Hong Kong Telecom proposed a joint venture with Taiwanese companies to provide mobile phone service in Taiwan. CITIC Pacific, a major mainland-owned investor, owns some 8 percent of Hong Kong Telecom. Moreover, one of the proposed joint-venture partners in Taiwan is China Development Corporation, owned by the ruling Kuomintang Party. While it would have been interesting to see the Communist and Kuomintang Parties unite as owners of a telephone company, the ROC government has apparently decided to keep the service sector

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<sup>72</sup> See *Taiwan Economic Daily News*, July 6, 1996, 547, and July 22, 1996, 615; and *Free China Journal (Business)*, May 3, 1996, 107. Because of U.S. objections to the 20 percent limit on mobile services, the ROC might reinterpret the law to permit a 59 percent limit or enact new legislation. Note that the ROC still retains a 20 percent limit on foreign ownership (with a 7.5 percent limit for any individual owner) of companies listed on the Taiwan Stock Exchange. See Central News Agency, May 29, 1996, 515.

<sup>73</sup> See *Taiwan Economic Daily News*, June 20, 1996, 467, and June 25, 1996, 488.

<sup>74</sup> See Chi Schive (1995), 14.

<sup>75</sup> See *Free China Journal (Business)*, June 19, 1996, 63.

<sup>76</sup> See *Taiwan Economic Daily News*, June 20, 1996, 467; *Free China Journal (Economy)*, May 17, 1996, 187; and Central News Agency, February 15, 1996, 163.



closed for the time being. However, the government may decide to permit FDI in the manufacturing sector on a case-by-case basis, provided mainland interests own less than 20 percent of the foreign investor. The Investment Commission believes it may be futile to monitor publicly traded foreign companies for mainland ownership. To do so effectively would require onerous controls and would therefore thwart the objective of improving the investment climate.<sup>77</sup> The Council for Economic Planning and Development (CEPD) nevertheless quietly withdrew its proposal for relaxing controls after President Lee Teng-hui called for a reexamination of FDI policy on August 14, 1996.<sup>78</sup>

The ROC also offers incentives to encourage desirable types of inward FDI. For example, it offers 5-year tax exemptions for large-scale or high-technology projects and for multinational companies that make Taiwan their regional headquarters for manufacturing and marketing.<sup>79</sup> The Ministry of Economic Affairs has established special country desks to help investors from Japan, the United States, and Europe. Moreover, since 1955 the ROC has offered preferential treatment to overseas Chinese, including those from Hong Kong. Privileges include tax exemptions and advantages in obtaining loans, transferring remittances and personal assets, and acquiring production facilities.<sup>80</sup>

Currently, the ROC is making a special effort to attract Hong Kong companies that are uneasy about PRC sovereignty in Hong Kong after July 1, 1997. For example, visas will be available for 5 years rather than the usual 1 year. The ROC will also offer start-up capital and help in promoting products.<sup>81</sup>

Despite these efforts, however, ROC incentives lag those of other investment hosts in the region in certain respects. A comparative study by the Ministry of Economic Affairs, for example, found the following:

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<sup>77</sup> See *Taiwan Economic Daily News*, July 9, 1996, 547; July 15, 1996, 578; and July 27, 1996, 645. The ROC does not plan to allow mainland interests to invest on the Taiwan Stock Exchange because of the potential for disrupting that market. See Central News Agency, August 15, 1996, 242.

<sup>78</sup> See Central News Agency, August 19, 1996, 301.

<sup>79</sup> See *Free China Journal (Economy)*, October 13, 1995, 19, and April 19, 1996, 142. Through June 4, 1996, the Ministry of Economic Affairs had signed strategic alliance agreements with 39 foreign partners, resulting so far in 21 FDI projects and \$2.68 billion in investment. See Central News Agency, June 4, 1996, 43.

<sup>80</sup> Overseas Chinese, however, are subject to the same investment controls as other foreign firms. See Yeh (1994), 136.

<sup>81</sup> See *Taiwan Economic Daily News*, June 4, 1996, 359.

- Singapore offers a 10 percent corporate tax rate for 10 or more years to multinational companies establishing regional headquarters; the ROC has no concessionary rate.
- Singapore and Malaysia offer tax exemptions as long as 10 years for selected high-technology FDI; the ROC limit for strategic industries is five years.
- Hong Kong's maximum corporate tax rate is 17.5 percent; the ROC rate is 25 percent and it imposes a 20 percent capital gains tax on repatriated earnings.<sup>82</sup>

### 3. Surveys of Investment Environment

Taiwan's overall attractiveness as a site for FDI is periodically assessed in published rankings of economies around the world. In one report that the ROC government seems to pay particular attention to, that of Lausanne International Institute for Management and Development in Switzerland, Taiwan's 1996 ranking for competitiveness was a disappointing 18th out of 46 economies, based on 225 wide-ranging criteria.<sup>83</sup> The top four economies in this ranking are the United States, Singapore, Hong Kong, and Japan, with the mainland at 26th place and Russia at the bottom. The ROC's Vice President and Premier Lien Chan aims to move Taiwan into the Lausanne top five by the year 2000. Also, a March 1996 survey of 161 foreign businesses in Taiwan similarly ranked Taiwan's investment climate a disappointing sixth best in East Asia, trailing the mainland, Vietnam, Singapore, Malaysia, and Thailand.<sup>84</sup>

Taiwan has done better in several other international rankings. For example the World Economic Forum of Geneva ranks Taiwan ninth out of 49 economies for competitiveness, with non-economic factors in particular holding Taiwan's score down.<sup>85</sup> A March 1996 ranking of investment environments by U.S.-based Business Environment Risk Intelligence (BERI) ranked Taiwan fourth out of 50 countries. Despite tensions with the mainland, BERI ranked Taiwan fifth for political risk, third for operational risk, fourth for ease of remittance and repatriation of funds, and fifth for the quality of its labor force.<sup>86</sup>

Potential disadvantages of Taiwan's investment environment include inadequate physical infrastructure, corruption, administrative inefficiency, political risk, capital flow

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<sup>82</sup> See China Economic News Service, June 15, 1996, 117-18.

<sup>83</sup> See Central News Agency, May 28, 1996, 491-92, and June 7, 1996, 113.

<sup>84</sup> See Central News Agency, March 30, 1996, 320.

<sup>85</sup> *Free China Journal (Economy)*, June 7, 1996, 205-6.

<sup>86</sup> See *Free China Journal (Economy)*, May 10, 1996, 179.

restrictions, a relatively opaque business environment, shortages of skilled labor and land, a small domestic market, and a dearth of English speakers.<sup>87</sup> Potential advantages include Taiwanese business connections with the mainland, a high-quality labor force with an abundance of scientific and technical workers, and a lack of racial discrimination toward expatriates.

Both Lausanne and the World Economic Forum ranked Taiwan's infrastructure worse than 30th. Problems particularly include inadequate power and industrial water supplies and transportation. Major public infrastructure projects to address these problems seem inevitably to get bogged down.<sup>88</sup>

Germany's Transparency International ranked the ROC 29th out of 54 economies on its 1996 business bribery index. New Zealand ranked first as the least corrupt country. Singapore and Australia were also listed in the top 10, with Japan and Hong Kong in the second 10, and the mainland and Indonesia in the bottom 10. The ranking paid particular attention to the reported behavior of trade, tax, and customs officials.<sup>89</sup>

The government administration in Taiwan is often criticized as inefficient, but it does well in the international rankings. Lausanne ranked Taiwan sixth for government efficiency, with Singapore and Hong Kong ranked second and third. BERI placed Taiwan third. The World Economic Forum ranked Taiwan fifth, with Singapore and Hong Kong ranking first and second.<sup>90</sup> Similarly, the March 1996 survey of 161 foreign businesses in Taiwan reported that most ROC government agencies lacked administrative efficiency, but the survey gave high marks to economic agencies dealing with foreigners, including the Ministry of Economic Affairs, the Board of Foreign Trade, the Investment Commission, and the Industrial Development Bureau.<sup>91</sup> Wang Yung-Tsai of Formosa Plastics Group nevertheless criticizes the government for its inability to expedite major (domestic) investment projects such as the Changhua industrial park, which has not opened after 17 years, and the sixth naphtha cracker, which has not been completed after 10 years.

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<sup>87</sup> See Central News Agency, August 12, 1996, 175; and August 9, 1996, 135; and Simon (1994), 205. Hong Kong's PERC also identified a need to improve legislation protecting business information, copyrights, and integrated circuits. See *Free China Journal (Business)*, June 28, 1996, 144.

<sup>88</sup> See Central News Agency, July 30, 1996, 398.

<sup>89</sup> See Central News Agency, June 3, 1996, 35, and July 30, 1996, 396.

<sup>90</sup> See *Taiwan Economic Daily News*, July 19, 1996, 602-3.

<sup>91</sup> See Central News Agency, March 30, 1996, 320.

Taiwan traditionally was viewed as a politically stable investment site, but recent tensions with the mainland have brought that view into question. For example, Hong Kong's Political and Economic Risk Consultancy (PERC) ranked Taiwan 4th out of 12 Asian economies for economic and political risk. Singapore, Japan, and Hong Kong were listed ahead of Taiwan, the mainland was ranked 8th, and Vietnam last. Taiwan was held back in particular by its potential for political conflict, for which its ranking dropped from 5th to 11th between 1995 to 1996.<sup>92</sup>

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<sup>92</sup> See *Free China Journal (Business)*, June 28, 1996, 144.

### **III. TRADE**

Trade is critical for an economy like Taiwan, whose domestic markets are too small to support its industries at an efficient scale. Trade enables Taiwan to specialize production in areas where it has a comparative advantage, exporting the resulting products and importing what it does not produce. Thus, Taiwan is able to support a higher standard of living than it could as an autarkic island trying to meet its own needs. It is significant, then, that the separation scenario threatens Taiwan's trade with both the mainland and other countries. This chapter presents background information on the extent and character of Taiwan's existing trade relations.

#### **A. TRADE WITH THE MAINLAND**

##### **1. Trade Volume**

Taiwanese businessmen conduct a substantial and growing trade with the mainland. This trade is conducted indirectly, via Hong Kong and other tertiary areas, because of ROC prohibitions on direct trade. Much, but not all, of this trade is associated with Taiwanese factories on the mainland that import many production materials and transform them into finished products to be exported around the world. Cross-strait trade has now reached what the ROC once considered the maximum safe level, making the ROC potentially vulnerable to manipulation by the PRC.

Estimates of cross-strait trade are presented in Table III-1. These estimates are constructed by the ROC based on trade flows to and through Hong Kong and, thus, do not include trade that may flow through other tertiary areas, e.g., Japan.<sup>1</sup> As the table indicates, trade growth has been very strong since the PRC began opening itself to foreign investment and trade in late 1978. The average annual growth rate for total cross-strait trade between 1979 and 1995 was 41.9 percent. Between 1992 and 1995, trade was still growing at a strong 27.1 percent rate.

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<sup>1</sup> The focus on trade via Hong Kong should cause Table III-1 to understate total cross-strait trade. The PRC's own customs statistics nevertheless show \$59.41 billion in cross-strait trade from 1991 to 1995, only 82 percent of the \$72.86 billion included for those years on Table III-1. See Central News Agency, June 15, 1996, 378.

**Table III-1. Taiwan's Trade with the Mainland**

Year	Exports (\$M)	Imports (\$M)	Exports: Imports
1979	21	56	0.4
1980	235	76	3.1
1981	385	75	5.1
1982	195	84	2.3
1983	201	90	2.2
1984	426	128	3.3
1985	987	116	8.5
1986	811	144	5.6
1987	1,227	289	4.2
1988	2,242	479	4.7
1989	3,332	587	5.7
1990	4,395	765	5.7
1991	7,494	1,126	6.7
1992	10,548	1,119	9.4
1993	13,993	1,104	12.7
1994	14,652	1,852	7.9
1995	17,890	3,080	5.8

Source: Schive (1995), 92, and *Free China Journal (Economy)*, January 12, 1996 and May 31, 1996.

Since 1980, Taiwan has enjoyed a surplus in its trade with the mainland. Overall, its cross-strait exports have been seven times greater than its imports. This pattern became particularly strong beginning in 1985, when the ROC lifted its trade embargo for exports but not imports. The ratio dropped somewhat in 1994 and 1995 as the ROC selectively relaxed its import controls, allowing imports to grow faster than exports between 1993 and 1995. The Taiwan side nevertheless still holds a large trade surplus.

The imbalance between exports and imports is also reflected in Table III-2. By 1995, for example, Taiwan's exports to the mainland amount to 16 percent of its total exports to all destinations. Imports from the mainland, however, accounted for only 3 percent of its imports from all sources. At one time, the ROC defined 10 percent as the maximum safe share for mainland trade.<sup>2</sup> Table III-2 indicates that exports burst through that threshold in 1992. The import share, while it remains fairly low, has risen enough to bring the mainland share of Taiwan's total trade virtually to 10 percent. From the

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<sup>2</sup> See, for example, Tung (1994), 161, and Kreisberg (1993), 85.

perspective of the mainland, cross-strait trade makes a relatively smaller contribution, although imports from Taiwan do account for 13 percent of the mainland's total imports. While the mainland's cross-strait goods exports are still fairly small, it does have significant service exports in the form of Taiwanese tourist spending on the mainland.<sup>3</sup>

**Table III-2. Cross-Strait Trade as Percentage of Overall Trade**

Year	For Taiwan			For Mainland		
	Exports	Imports	Total	Exports	Imports	Total
1979	0.1	0.4	0.3	0.4	0.1	0.3
1980	1.2	0.4	0.8	0.4	1.2	0.8
1981	1.7	0.4	1.0	0.4	1.8	1.1
1982	0.9	0.4	0.7	0.4	1.0	0.7
1983	0.8	0.4	0.6	0.4	0.9	0.7
1984	1.4	0.6	1.1	0.5	1.6	1.1
1985	3.2	0.6	2.2	0.4	2.3	1.6
1986	2.0	0.6	1.5	0.5	1.9	1.3
1987	2.3	0.8	1.7	0.7	2.8	1.8
1988	3.7	1.0	2.5	1.0	4.1	2.6
1989	5.0	1.1	3.3	1.1	5.6	3.5
1990	6.5	1.4	4.2	1.2	8.1	4.3
1991	9.8	1.8	6.2	1.6	11.7	6.3
1992	12.9	1.6	7.6	1.3	13.1	7.0
1993	16.5	1.4	9.3	1.2	13.5	7.7
1994	15.7	2.2	9.3	1.5	12.7	7.0
1995	16.0	3.0	9.7	2.1	13.5	7.5

Source: Schive (1995), p. 92, Asian Development Bank (1994), and *Far Eastern Economic Review*, January 25, 1996, p. 45.

## 2. Trade Controls

Cross-strait trade can be traced at least to 1978, when the PRC unilaterally decided to allow trade with Taiwan via Hong Kong or Macao.<sup>4</sup> The ROC lifted its trade embargo against the mainland in July 1985 and formally authorized indirect trade in 1987. From the beginning, the ROC's export controls were relatively relaxed, in part because of the great

<sup>3</sup> In 1993, Taiwan accounted for 4 percent of the mainland's tourist arrivals and was the third highest source. See Sung (1995), 33.

<sup>4</sup> See Yeh (1995), 61-62 for the early history of cross-strait trade controls.

technical difficulty of tracking exports.<sup>5</sup> The ROC continued to prohibit imports from the mainland until May 1990, when it allowed indirect imports of 155 categories of raw materials, e.g, medical herbs, fish, fine feathers, antibiotics, minerals, cotton, and lumber. Still wary of PRC attitudes, the ROC picked items that could be sourced elsewhere should the PRC cut off supplies. By 1993, the ROC permitted importation of some 1,654 items, 20 percent of which were semifinished rather than raw materials. The list also included some finished industrial products.<sup>6</sup>

The ROC continued to liberalize its import rules over the years until, on July 1, 1996, it switched from a positive to a negative list for the control of industrial products and materials.<sup>7</sup> It also considerably increased the number of such items that could be imported. By mid-1996, the positive list permitted 2,963, or 40 percent, of the 7,480 industrial items produced on the mainland to be imported. The new negative list bans 3,526 industrial items and thus allows 3,954, or 53 percent, of the items.<sup>8</sup>

Like the old positive list, the negative list is designed in part to protect Taiwanese industries, banning such products as textiles, plastics, animal feed, agricultural chemicals, machinery, semiconductors, medicine, and medical equipment. However, the ongoing liberalization is designed especially to make Taiwanese industries more competitive by giving them access to low-cost mainland materials. Inevitably, liberalization will introduce new competition from the mainland, hurting particularly those industries characterized by labor-intensive production, heavy pollution, and low-value-added.<sup>9</sup>

While semifinished industrial products and materials dominate permissible imports, the ROC has over the years also opened to imports of a few finished products and agricultural goods. For example, on April 19, 1996, the ROC added 46 industrial items to the 2,917 already permitted. Among the additions were organs, refrigerators, washing machines, notebooks, earphones, hairpins, combs, and dyes.<sup>10</sup> The ROC also allows the

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<sup>5</sup> See Xu (1994), 144. Monitoring exports is difficult because they can be shipped to an allowed destination and then reexported to the mainland.

<sup>6</sup> See Jones et al. (1993), 135.

<sup>7</sup> A positive list includes products that may be imported; a negative list includes products that may not.

<sup>8</sup> See *Free China Journal (Economy)*, April 19, 1996, 162-63, and *Taiwan Economic Daily News*, July 3, 1996, 530.

<sup>9</sup> See *Free China Journal (Economy)*, January 6, 1996, 88.

<sup>10</sup> See Central News Agency, April 19, 1996, 189.



import of some 177 types of agricultural and farm products. This list has not been expanded recently because Taiwanese farmers have demanded protection.<sup>11</sup>

Further liberalization seems inevitable. The PRC is demanding better access to Taiwanese markets in order to redress the severe trade imbalance shown above.<sup>12</sup> In addition, both the mainland and Taiwan are seeking membership in the World Trade Organization. If they both succeed, they will incur obligations to open their economies further on a most favored nation (MFN) basis to all members, including each other.

In 1995 and 1996, in addition to expanding the number of permissible import items, the ROC liberalized trade rules in a number of ways:

- In October 1995, the ROC allowed bonded factories to sell their output within Taiwan after paying tariffs ranging from 70 percent to 100 percent. Previously, the export-oriented bonded factories, which import materials duty-free, were allowed to sell domestically only products whose import content was less than 50 percent. The change includes products that incorporate semifinished imports from the mainland. At the same time, the ROC allowed bonded factories to import certain raw materials from the mainland for sale to other bonded factories and to companies in export processing zones and science-based industrial parks, provided the resulting finished products were exported.<sup>13</sup>
- In April 1996, the ROC lifted its prohibition against importing mainland technology.<sup>14</sup>
- In May 1996, the ROC eliminated the rule that had previously required state-owned companies to obtain special permits to import mainland products.<sup>15</sup>
- On May 27, 1996, the ROC further relaxed import controls, allowing 93 percent of imported mainland goods to enter without import permits. The ROC authorized individual Taiwan trading companies, rather than only associations, to apply to import mainland products.<sup>16</sup>

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<sup>11</sup> See Central News Agency, May 28, 1996, 491.

<sup>12</sup> A proper accounting of the impact of Taiwan's trade on the mainland's trade balance should recognize that a substantial share of Taiwan's exports to the mainland is incorporated in products that are subsequently exported to global markets.

<sup>13</sup> See *Free China Journal (Economy)*, October 20, 1995, 23.

<sup>14</sup> See Central News Agency, April 26, 1996, 317.

<sup>15</sup> The state-owned companies had not been permitted to import raw materials from the mainland until March 22, 1991. See Lin (1995), 150, and *Free China Journal (Politics)*, May 31, 1996, 355.

<sup>16</sup> See Central News Agency, May 27, 1996, 477-78.

The PRC maintains substantial barriers to the import of products from all sources, protecting especially young industries that it considers strategic as well as established industries that are not prepared for foreign competition. However, rather than discriminate against trade with Taiwan, the PRC generally seems to promote it. For example, in the early years, from 1979 until mid-1981, the PRC in fact exempted exports from Taiwan to the mainland from paying the high tariffs it charged other suppliers.<sup>17</sup> This practice had to be discontinued in mid-1981 because too many traders were fraudulently claiming to offer Taiwanese goods in order to obtain favored treatment. Moreover, the PRC has consistently promoted FDI from Taiwan and accommodated the associated imports of production equipment and materials.

The PRC nevertheless has taken a number of steps recently that, while not directed exclusively at Taiwan, nevertheless affect cross-strait trade:

- The PRC imposed an incremental tax on imports and reduced the export drawback rate, i.e., the rate at which import duties are refunded when imported materials are subsequently exported after processing.<sup>18</sup>
- The PRC was reported to be cracking down on illegal evasion of import duties. It also decided to limit the work week to five days.<sup>19</sup>
- The PRC reportedly planned to cancel seven kinds of tariff exemptions for FDI factories on January 1, 1996, affecting machinery, components, and materials.<sup>20</sup>
- The PRC reportedly demanded that factories on the mainland obtain a higher proportion of their supplies of man-made fibers and transportation equipment components from mainland rather than foreign sources. This will adversely affect Taiwan's exports of motorcycle parts, textiles, and plastic and rubber products.<sup>21</sup>

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<sup>17</sup> See Ash and Kueh (1995), 64.

<sup>18</sup> See *Free China Journal (Economy)*, May 10, 1996, 181.

<sup>19</sup> See *Free China Journal (Business)*, May 31, 1996, 124.

<sup>20</sup> See *Free China Journal (Economy)*, November 3, 1995, 33.

<sup>21</sup> See *Free China Journal (Economy)*, October 6, 1995, 13, and *Free China Journal (Business)*, June 28, 1996, 142.

### 3. Circumvention of Controls

The ROC has had considerable difficulty enforcing its regulations on cross-strait trade. For exports, the primary problem is that fewer than half of Taiwan's exports to the mainland adhere strictly to the regulations requiring that trade be indirect. For imports from the mainland, there also seems to be a problem in limiting imports to the types of products authorized.

The ROC's requirement for indirect trade is, basically, that goods shipped between Taiwan and the mainland be off-loaded in a third area such as Hong Kong and then shipped from that area to the final destination in Taiwan or the mainland. This requirement is costly in economic terms but is viewed as an important political bargaining chip by the ROC. Economically, shipment costs are increased because goods must be off-loaded and processed through a port that is often unnecessary and inconvenient. For example, while Hong Kong is a convenient and efficient port for goods bound for many locations in nearby Guangdong Province, it is an unnecessary and out-of-the-way stop for goods bound for Fujian Province, Shanghai, and areas further north. Shippers thus have an incentive to lobby for a change in regulations—or to ignore them in many cases.

Politically, the requirement that trade be indirect is a legacy of the civil war between the Kuomintang and the CCP, and has now become a bargaining chip for rapprochement between the ROC and the PRC. That is, direct trade would involve the first two of the three direct links—commerce, transportation, and postal service—that the ROC is withholding until the PRC agrees to meet the following conditions:

- Accept the ROC as a political entity.
- Renounce the use of force against Taiwan.
- Allow the ROC to exercise international diplomatic status.<sup>22</sup>

Clearly, the strength of this bargaining chip is eroded to the extent that the ban on direct trade is violated.

Violations occur for both exports and imports, but they are most visible for the former. Violations may take the form of transshipment, transit shipment, and illegal direct shipment.<sup>23</sup> Transshipments are shipments that are off-loaded in a tertiary area such as Hong Kong without going through customs (reducing costs somewhat and preserving

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<sup>22</sup> See, for example, *Free China Journal (Politics)*, December 29, 1995, 141.

<sup>23</sup> The modes of violation are explained carefully in Sung (1995), 28–31.

confidentiality) because they are represented to Hong Kong authorities as being consigned to mainland owners, contrary to the papers originally filed with the ROC authorities. Transit shipment is similar to transshipment except that the ship carrying the consigned cargo stops momentarily in a third area such as Hong Kong but the cargo is not offloaded, which saves both money and time.<sup>24</sup> The third form of violation, illegal direct shipment, involves chartering a third-country-flag vessel, giving the ROC authorities a legal tertiary destination, and then sailing directly to the mainland.<sup>25</sup> Of the three methods, the last is evidently the easiest for the ROC to uncover, exposing the perpetrators to fines.

Table III-3 reports estimates of the share of cross-strait trade via Hong Kong that is direct, i.e., violates ROC regulations.<sup>26</sup> By 1993, direct trade accounted for more than half of Taiwan's exports to the mainland via Hong Kong. In the future, this share may increase

**Table III-3. Direct vs Indirect Cross-Strait Trade via Hong Kong**

Year	Share of Trade (%)			
	Exports		Imports	
	Direct	Indirect	Direct	Indirect
1986	3.3	96.7	0.0	100.0
1987	9.2	90.8	5.3	94.7
1988	11.2	88.8	2.7	97.3
1989	24.7	75.3	5.7	94.3
1990	35.8	64.2	8.0	92.0
1991	46.8	53.2	29.7	70.3
1992	47.3	52.7	50.7	49.3
1993	52.7	47.3	na	na

na = not available

Source: Sung (1995), p. 31.

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- <sup>24</sup> An October 1988 ROC law permits trade to be conducted in chartered third-country-flag vessels that sail between Taiwan and the mainland, provided the vessels stop and are unloaded in a third area. See Sung (1995), 28. Further, in January 1989, the ROC announced it would no longer verify the final destination of exports so long as they were not shipped directly to the mainland. See Lin (1995), 132.
- <sup>25</sup> A less formal method is the nighttime smuggling carried on by Taiwanese fishing boats. Fujian officials designated 11 ports for this trade, and 6 shipping routes are reportedly used, mainly to deliver mainland food to Taiwan. A 1987 ROC survey estimated direct shipments at \$100 million, much of it involving the Fujian ports. See Wu (1994), 177.
- <sup>26</sup> Sung Yun-wing estimates direct exports as the difference between Taiwan's tally of exports to Hong Kong and Hong Kong's estimate of imports from Taiwan, adjusting for reexport margins and insurance and freight costs. Direct imports are estimated by imputing prices to the physical volume of Hong Kong transshipments from the mainland to Taiwan. See Sung (1995), 29-31.

further as Taiwanese FDI on the mainland spreads northward (see the discussion of FDI above). That is, the cost penalty for shipping production materials to the north via Hong Kong in the south will increase, and more shippers are likely to flout the law and sail directly to mainland ports.<sup>27</sup>

Taiwan's imports from the mainland are susceptible to the same methods of direct trade as its exports. As shown in Table III-3, by 1992 more than half of Taiwan's mainland imports are estimated to have been traded directly. Not only is the trade direct, but much of it violates the ROC's restrictions on what types of product may be imported. Prohibited mainland goods arrive in Taiwan with a false certificate of origin from, say, Thailand and are counted by the ROC as imports from Thailand, to which the ROC's mainland product restrictions do not apply. One study of Hong Kong customs data for 1990 concluded that most of Taiwan's top 20 imports from the mainland were not approved products.<sup>28</sup>

#### **4. Type of Products Traded**

Cross-strait trade is primarily industrial, with each side providing mainly materials and parts to be used in factories on the other side. Much of this trade in both directions is related to the Taiwan-invested factories on the mainland.

Table III-4 summarizes the principal types of product exported from Taiwan to the mainland. Textiles for use in clothing and other products dominate, accounting for over 30 percent of Taiwan's exports to the mainland. Together, the four types of industrial inputs shown account for at least two-thirds of exports in 1992 and 1994. Much of the remainder also includes industrial inputs, e.g., parts for bicycles, mopeds, shoes, and umbrellas. The data in Table III-4 are too sparse to establish a trend, but they suggest some movement away from textiles and industrial machinery and toward electrical and electronic parts and chemicals.

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<sup>27</sup> Robinson and Lin (1994), 464–65, reported a large volume of trade via ships from Taiwan changing course for Fujian once they reach international waters.

<sup>28</sup> See Chi Schive (1995), 31.

**Table III-4. Types of Exports from Taiwan to Mainland**

Export	Share of Exports (%)		
	1992	1994	Change
Textile fabrics and yarn	34.4	31.6	-2.8
Industrial machinery and equipment	12.4	9.1	-3.3
Electrical and electronic parts	10.3	13.2	2.9
Plastic and rubber raw materials	11.8	12.8	1.0
Other	31.1	33.3	2.2
Total	100.00	100.00	

Source: *Republic of China Yearbook* (1996) and *Almanac of China's Foreign Economic Relations and Trade* (1993, 1994).

Table III-5 provides summary data for the types of imports that were included among Taiwan's top 20 imports from the mainland in 1994.<sup>29</sup> Those 20 types of imports represented 39.3 percent of import volume from the mainland in 1993 and 47.9 percent in 1994; thus, they give a substantial but incomplete picture of the distribution of imports. All of the imports in the top 20 are industrial inputs, as would be expected based on the ROC's import controls discussed above.<sup>30</sup> Mineral and non-mineral natural resources account for a substantial but declining share of the imports, growing less in 1994 than imports of metals and electrical parts.<sup>31</sup> Shoe parts similarly have a strong but lagging growth rate. Table III-5 thus suggests that imports from the mainland are increasing in sophistication.<sup>32</sup>

<sup>29</sup> The data shown for 1993 are the imports in 1993 of the types of products that were in the top 20 in 1994.

<sup>30</sup> In 1990, the top 20 included such finished consumer products as umbrellas, men's shirts, and toys. However, these products dropped from that august group by 1994. See Yin and Yen (1992), 61.

<sup>31</sup> Bituminous coal accounts for almost half of mineral imports. It has been imported since 1988, but the state-owned Taiwan Power company that used most of it bought it on the spot market because of prohibitions against direct contracting with the mainland. See Clough (1993), 44. Non-mineral resources include feathers, wood chips, herbal medicine, and leather.

<sup>32</sup> This continues a trend started in the 1980s. From 1985 to 1990, raw materials (i.e., fuel, minerals, and agricultural products) dropped from 75 percent to 22 percent of Taiwan's imports, while semifinished manufactured products increased from 13 percent to 54 percent of the total. See Ash and Kueh (1995), 69.

**Table III-5. Summary of Top 20 Imports by Taiwan from Mainland**

Import	Value (\$M)		% Change
	1993	1994	
Minerals	176.7	289.7	63.9
Non-mineral resources	66.3	148.2	123.6
Refined metals and semifinished products	78.7	212.8	170.4
Electrical parts and equipment	26.9	105.1	290.3
Parts for shoes	85.5	130.6	52.8
Subtotal	434.1	886.4	104.2
% of Total Imports from Mainland	39.3%	47.9%	

Source: *Almanac of China's Foreign Economic Relations and Trade*

Much, but not all, of Taiwan's cross-strait trade is driven by mainland factories built through Taiwanese FDI. These factories import much of their production equipment and materials from Taiwan. For example, a June 1994 survey by the ROC found that more than half of Taiwan-invested factories on the mainland imported materials and machinery from Taiwan.<sup>33</sup> Another study found that Taiwanese-invested factories on the mainland imported some 54 percent of their materials and 75 percent of their production equipment.<sup>34</sup> Companies that move production from Taiwan to the mainland tend to retain their existing ties to Taiwanese suppliers. This is particularly true for their ties to suppliers of petrochemicals and synthetic fibers.<sup>35</sup> At the same time, however, a substantial share of Taiwan's exports to the mainland are evidently absorbed by mainland-owned companies. Thus, in 1990, an estimated 37.3 percent of Taiwan's cross-strait exports were shipped to Taiwan-invested factories, leaving 62.7 percent to be purchased by mainland firms.<sup>36</sup> Similarly, an estimated two-thirds of the materials, components, and spare parts exported from Taiwan to the mainland in 1992 were supplied to mainland-owned enterprises.<sup>37</sup>

Taiwanese factories on the mainland also account for a portion of Taiwan's imports from the mainland. For example, a survey by the Chung-Hua Institution for Economic Research in Taiwan found that 25 percent of Taiwan-invested firms on the mainland

<sup>33</sup> See Chi Schive (1995), 35.

<sup>34</sup> This estimate evidently refers to the early 1990s. See Wu (1995), 120.

<sup>35</sup> See *Wall Street Journal*, May 17, 1993, C11.

<sup>36</sup> See Yin and Yen (1992), 64. Since an estimated 85 percent of the output of Taiwanese factories was exported, Taiwan's exports to the mainland evidently were more successful at penetrating the domestic mainland market than Taiwan-invested mainland factories were.

<sup>37</sup> See Tung (1994), 161.

shipped some products to Taiwan, amounting to perhaps 5.8 percent of the total output of Taiwanese factories on the mainland.<sup>38</sup> Some 50 percent of these shipments are semifinished products. Industries most likely to ship back to Taiwan include precision machinery, machine equipment, chemicals, pulp and paper, plastics, wood, and base metals.

## **B . OTHER TRADE**

International trade plays a very important role in Taiwan's economy, facilitating and often driving economic growth. Taiwan's manufacturing sector has proven resilient in maintaining strong export growth despite major changes in factor prices, especially as workers have become scarce and expensive. A continued ability to penetrate global export markets is critical to Taiwan's future viability.

### **1 . Trade Volume**

Taiwan's trade performance over the last 17 years is summarized in Table III-6. Since 1979, exports and imports have grown an average of 12.7 percent and 12.9 percent per year, respectively. Since 1990, export and import growth rates have averaged a still strong 10.7 percent and 13.6 percent. Taiwan saved its strongest performance for 1995, when exports and imports grew 20.0 percent and 21.3 percent thanks to the appreciation of Japan's currency and a strong global market for computers.

Throughout the period, exports maintained a consistent edge over imports, generating a trade surplus that reached a huge 20.3 percent of GNP in 1986 and peaked at almost \$19 billion in 1987. Taiwan's surpluses, reflecting an excess of savings over investment, provided funds for the surge in outward FDI in the late 1980s. In recent years,

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<sup>38</sup> See Chi Schive (1995), 36.



**Table III-6. Taiwan's Exports and Imports (1979-1995)**

Year	Value (\$M)			% of GNP	
	Exports	Imports	Surplus	Total Trade	Surplus
1979	16,515	14,813	1,702	94.4	5.1
1980	19,745	19,541	204	95.0	0.5
1981	22,635	21,480	1,155	92.1	2.4
1982	22,102	19,095	3,007	84.9	6.2
1983	25,175	20,420	4,755	86.9	9.1
1984	30,393	22,026	8,367	87.6	14.0
1985	30,741	19,983	10,759	80.4	17.0
1986	39,770	24,037	15,733	82.5	20.3
1987	53,794	34,812	18,982	85.5	18.3
1988	60,600	49,864	10,736	88.1	8.6
1989	55,255	48,107	7,149	68.8	4.8
1990	67,196	54,669	12,527	75.7	7.8
1991	76,153	62,902	13,251	77.3	7.4
1992	81,449	72,192	9,257	71.0	4.3
1993	84,961	77,172	7,789	71.7	3.4
1994	93,050	85,350	7,700	73.1	3.2
1995	111,690	103,570	8,120	81.7	3.1

Source: *Asian Development Bank* (1994) and *Free China Journal (Economy)*, May 31, 1996, p. 199.

the ROC has successfully reduced its trade surplus to a more manageable size, namely 3.1 percent of GNP for 1995. This has been accomplished in part through stronger growth in domestic demand, reflected in the lower share of total trade (i.e., exports plus imports) in GNP after 1988. Taiwan's trade-GNP ratio nevertheless remains relatively high, for example, 71.7 percent in 1993 compared with a global average of 15.7 percent.<sup>39</sup>

## 2. Geographical Distribution

As shown in Table III-7, Taiwan's trade is distributed fairly widely. Moreover, half of Taiwan's exports and two-third's of its imports are transacted with the U.S., Japan, and Europe. The mainland's 9.7 percent share of Taiwan's trade (discussed above) is included largely in the Hong Kong entry in Table III-7. As of 1995, trade flows with members of

<sup>39</sup> See World Bank (1995), 162-63 and 186-87. Taiwan's ratio is high relative to Japan's 15.4 percent, the PRC's 33.7 percent, and South Korea's 49.2 percent, but it is dwarfed by Hong Kong's 261.5 percent and Singapore's 286.5 percent. Taiwan's ratio is roughly comparable to those of small trading nations in Europe, including Denmark at 55.6 percent, Austria at 48.7 percent, and the Netherlands at 85.9 percent.

the Association of Southeast Asian Nations (ASEAN) and with the mainland were roughly equal, with ASEAN members having a slight edge.

**Table III-7. Geographic Distribution of Taiwan's Trade (1995)**

Country	Value (\$M)			% of Total Trade
	Exports	Imports	Surplus	
US	26,410	20,769	5,641	21.9
Japan	13,167	30,271	(17,103)	20.2
Europe	15,727	18,701	(2,974)	16.0
Hong Kong <sup>a</sup>	26,121	1,843	24,279	13.0
ASEAN	13,903	10,191	3,713	11.2
Other	<u>16,361</u>	<u>21,796</u>	<u>(5,435)</u>	<u>17.7</u>
Total	111,690	103,570	8,120	100.0

<sup>a</sup>Includes reexports to/from mainland China.

Source: China Economic News Service.

Taiwan's role in the global supply chain is also reflected in Table III-7. It incurs a huge \$17.1 billion trade deficit with Japan, relying on that country for imports of capital equipment and sophisticated production materials. In turn, it earns a \$24.3 billion surplus with Hong Kong and the mainland, supplying somewhat less sophisticated production equipment and materials. It also earns a sizable surplus with the U.S., its principal customer for finished exports. Further, a substantial portion of Taiwan's Hong Kong surplus represents goods that will be incorporated into products by Taiwan-invested mainland factories and then exported to the United States. FDI on the mainland has thus helped shift U.S. attention from its trade deficit with Taiwan to its large and growing deficit with the mainland.

Table III-8 gives an indication of the long-term nature of these trends. The deficit with Japan has grown larger each and every year since 1985. The surplus with the U.S., however, peaked in 1987 and has generally trended downward ever since. The reduction can be attributed to Taiwan's gradually opening its domestic market to imports, allowing its currency to appreciate, and shifting many export factories to the mainland. Indeed, between 1987 and 1995, Taiwan's exports to the U.S. grew by only 11.5 percent in total, while its imports from the U.S. rose 171.6 percent. Over the same period, Taiwan's exports and imports with Japan grew by 88.5 percent and 155.7 percent respectively, suggesting that Japan also benefited from the more open Taiwanese market.

**Table III-8. Taiwan's Bilateral Trade Surpluses**

Year	Value (\$M)		
	U.S.	Hong Kong	Japan
1985	10,027	2,220	(2,088)
1986	13,581	2,543	(3,695)
1987	16,037	3,370	(4,855)
1988	10,461	3,665	(6,054)
1989	12,033	4,837	(6,966)
1990	9,134	7,110	(7,661)
1991	8,207	10,484	(9,669)
1992	7,801	13,634	(12,873)
1993	6,762	16,716	(14,222)
1994	6,294	19,729	(14,565)
1995	5,641	24,279	(17,103)

Source: Schive (1995), 82-85 and China Economic News Service.

### 3. Import Policy

Over the past 20 years, the ROC has substantially liberalized its import policy, moving from a largely closed economy to within striking distance of joining the World Trade Organization (WTO). However, a number of controls remain.

The average nominal import tariff, i.e., the average of published rates for existing tariffs, has dropped substantially. It was as high as 55.7 percent in 1974 but fell to 30.8 percent in 1984 and 12.6 percent in 1988. Current ROC plans are to cut the average nominal rate, which covers over 4,000 tariff items, to 7.9 percent by the year 2000.<sup>40</sup> The average real tariff rate, i.e., the ratio of customs duties collected to the total value of imports, has also dropped over this period. The average real rate was 11.6 percent in 1979 and 5.9 percent by 1990. Currently, it averages 4.2 percent and is expected to drop further to 3.5 percent.<sup>41</sup> Among the remaining high rates, tariffs for vehicles and agricultural items are particularly prominent.<sup>42</sup>

<sup>40</sup> The ROC plans to cut tariffs for 1,600 items by the end of August 1996. It also plans to reduce tariffs below 5 percent for 100 agricultural and industrial products by the year 2000. See Hou (1993), 258-59; *Taiwan Economic Daily News*, June 25, 1996, 486; and July 20, 1996, 607; and Central News Agency, June 27, 1996, 418.

<sup>41</sup> See Kleykamp(1993), 57-58; Hou (1993), 258-59; Chi Schive (1995), 14; and *Taiwan Economic Daily News*, July 20, 1996, 607.

<sup>42</sup> Se Kleykamp(1993), 57-58.

By 1991, the ROC's import licensing system required import licenses for 3,086 out of 9,004 items on its tariff schedule. In addition, 246 items were banned altogether, including arms, munitions, and several agricultural products such as rice. Most other agricultural products required import licenses.<sup>43</sup> Some of these barriers remain in effect, particularly for agricultural items such as chicken, beef, pork, and peanuts. Also, deficiencies in the distribution system tend to raise import prices and reduce sales.<sup>44</sup>

The ROC continues to liberalize its trade regulations, both to improve its investment climate and to prepare for membership in the WTO. Taiwan applied as a separate customs territory to reenter the WTO's predecessor, the General Agreement on Trade and Tariffs (GATT), in 1990 and began negotiating with GATT members in April 1994. In January 1995, Taiwan was accredited to the WTO as an observer. However, admission to the WTO is problematic at present since the PRC would view it as a great affront if Taiwan were accepted before the PRC itself joined. Negotiations with WTO members have also revealed a number of substantive issues that must still be addressed. These particularly include continuing restrictions on agricultural trade and services, automotive imports, and Taiwan's wine and tobacco monopoly system.<sup>45</sup> The government has drafted an omnibus bill to amend 20 existing ROC laws to conform with WTO requirements.<sup>46</sup>

#### **4. Types of Trade**

Taiwan's export structure has undergone major changes over the past decade. After the mid-1980s, rising labor costs and an appreciating currency left many of Taiwan's labor-intensive export industries uncompetitive. Since then, some industries have upgraded production or product technology to remain competitive. Others have moved their assembly work offshore, to the mainland or Southeast Asia. Impressive new high-technology

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<sup>43</sup> Very tight controls were maintained on chicken, wild rice, dried garlic, dried red beans, peanuts, wheat flour, catfish, livestock and poultry offals, and certain cuts of pork. Some pharmaceutical items were still refused licenses. See U.S. Trade Representative (1991), 206-7.

<sup>44</sup> See *Free China Journal (Economy)*, December 8, 1995, 63. At one time, most imports had to be sold through authorized Taiwanese agents. See Kleykamp(1993), 48.

<sup>45</sup> See Central News Agency, March 27, 1996, 298.

<sup>46</sup> Areas affected include trade regulations and tariffs, the central bank, accountants, architects, securities transactions, trademark and patent registration, publication, corporations, commodity taxes and inspection, and food hygiene. Additional bills must be drafted for the three export processing zones and agricultural development. See Central News Agency, May 10, 1996, 155-56.

industries have grown rapidly, maintaining the momentum of Taiwan's export growth. The structure of imports, in contrast, has remained largely unchanged for the past decade.<sup>47</sup>

Table III-9 illustrates the broad structure of Taiwan's trade. Exports are overwhelmingly industrial, accounting for over 96 percent of total exports. This contrasts sharply with exports in the 1950s, which were dominated by agricultural and processed agricultural products.<sup>48</sup> Note also that the ROC distinguishes "heavy and chemical" from other industries. Heavy and chemical industries tend to be more capital intensive, e.g., steel and petrochemicals, but also include high-technology industries, e.g., computers and telephone equipment. Industries other than heavy and chemical industries tend to be light, labor-intensive industries. Table III-9 indicates that heavy and chemical industries have come to dominate industrial exports. In 1995, they grew more rapidly than other industries, signifying the increasing sophistication of Taiwan's exports.

**Table III-9. Taiwan's Trade by Major Sector**

Sector	Value (\$M)		% Change
	1994	1995	
Exports			
Agricultural	460	482	4.7
Processed agricultural	3,348	3,802	13.5
Industrial	89,242	107,407	20.4
Heavy and chemical	50,294	65,423	30.1
Non-heavy and non-chemical	<u>38,948</u>	<u>41,984</u>	7.8
Total	93,050	111,690	20.0
Imports			
Capital goods	13,611	16,874	24.0
Raw materials	60,301	74,566	23.7
Consumer goods	<u>11,439</u>	<u>12,129</u>	6.0
Total	85,350	103,570	21.3

Source: China Economic News Service

On the import side, the structure is oriented primarily toward supporting industrial production, with capital goods and raw materials for production accounting for 88 percent

<sup>47</sup> This point is made by the ROC's Board of Foreign Trade in Central News Agency, May 19, 1996, 321.

<sup>48</sup> In 1952, the leading exports were sugar and rice. Industrial products accounted for less than 10 percent of total exports, but their share rose to 50 percent by 1962, 80 percent by 1971, and 94 percent by 1985. See Hou (1993), 248.

of imports in 1995. This dominance reflects the outsized nature of Taiwan's export sector, which must be supplied with materials and equipment. It also represents the legacy of the ROC's import substitution policies that, for example, encourage imports of automotive components so that finished automobiles can be assembled in Taiwan rather than imported. Note that the growth pattern for 1995 over 1994 reflects the coupling of an export boom with weak domestic final demand.

Taiwan's export growth initially was based on small- and medium-sized industries, i.e., those with fewer than, say, 100 workers.<sup>49</sup> From 1978 to 1985, for example, such firms accounted for about 65 percent of all exports. Moreover, those firms were very dependent on exports for their own growth, with exports constituting over 70 percent of their sales from 1981 to 1985. Increasingly, however, larger firms have come to dominate Taiwan's exports as the smaller, labor-intensive firms have shifted production overseas.

The export share for labor-intensive products fell from 47 percent in 1986 to 39 percent in 1993. At the same time, the share for capital-intensive products increased from 23 percent to 32 percent. The share for technology-intensive products, which may also be capital-intensive, rose from 18 percent to around 30 percent.<sup>50</sup> Thus, while Taiwan has not literally abandoned labor-intensive exports, the relative importance of these products is certainly on a downward trend.

The upgrading of Taiwan's export structure over time is also illustrated by the trends shown in Table III-10. Nondurable consumer goods, which once dominated exports, have dropped from a peak 36.8 percent of exports in 1984 to a 1993 share of only 18.1 percent. Durable consumer goods have also declined in relative importance. At the same time, the more sophisticated ready-for-use intermediate goods and machinery have increased in share from a combined 32.7 percent in 1981 to 55.3 percent in 1993.

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<sup>49</sup> See Hou (1993), 248.

<sup>50</sup> See Chi Schive (1995), 16.

**Table III-10. Percent Shares of Sectors in Taiwan's Exports  
(Percent)**

Year	Consumer Goods		Intermediate Goods		Machinery
	Nondurable	Durable	Unready for Use	Ready for Use	
1981	35.3	11.9	9.9	26.5	6.2
1982	35.6	11.1	10.4	25.3	6.2
1983	36.1	11.6	9.5	25.9	6.9
1984	36.8	11.0	9.1	25.6	9.0
1985	35.9	9.1	8.7	27.0	10.4
1986	35.6	11.0	7.5	26.2	10.9
1987	33.5	11.4	6.9	26.7	13.2
1988	29.8	10.1	8.8	27.8	15.4
1989	27.5	10.2	9.0	31.1	15.5
1990	23.7	8.7	9.5	35.0	16.3
1991	22.0	8.5	9.5	37.0	16.1
1992	19.8	8.0	9.5	39.1	17.2
1993	18.1	8.2	11.1	37.8	17.5

Source: Schive (1995), p. 69.

Table III-11 provides a more detailed look at product categories for Taiwan's international trade. Among exports, electronic products are the leading type, with continued strong growth in 1995. Note, however, that Taiwan's electronic imports roughly match the volume of exports, suggesting the high degree of international interdependence of this industry. Textiles, meaning the fibers, yarns, and fabrics from which clothing is made, remains a strong export category thanks to Taiwan's large base of petrochemical and synthetic-fiber plants. Exports of assembled clothing are much lower, however, and in fact declined in 1995, showing the sunset nature of this industry.<sup>51</sup> Finally, note the large and rapidly growing presence of information and communication products. This sector, which includes computers, computer peripherals, and telephone equipment, is a major success story for the ROC's policy of upgrading its export structure toward high-technology products.

<sup>51</sup> When the ROC government turned to export promotion in the late 1950s, it did not particularly favor one industry over another. Based on Taiwan's low wages, textile products became the leading exports by 1966. While textiles have remained important until the present day, the mix of exports has upgraded from assembled clothing to synthetic materials. By 1986, electrical machinery and apparatus had overtaken textiles as the leading export. See Hou (1993), 247-48.

**Table III-11. Taiwan's Trade by Type of Product**

Product Type	Exports			Imports		
	Value (\$M)		%	Value (\$M)		%
	1994	1995		1994	1995	
Electronic products	12,334	16,257	31.8	12,264	16,822	37.2
Textiles	9,389	10,911	16.2	na	na	na
Information and communication products	6,791	9,916	46.0	na	na	na
Machinery	7,208	8,351	15.9	8,077	10,349	28.1
Iron and steel and articles thereof	4,126	5,419	31.4	5,759	7,229	25.5
Vehicles, aircraft, vessels, and equipment	4,817	5,364	11.4	6,098	6,038	-1.0
Clothing and textile products	4,711	4,689	-0.5	3,253	3,521	8.3
Metal products (except iron and steel)	3,950	4,610	16.7	4,021	5,710	42.0
Electrical machinery	3,447	4,002	16.1	2,988	3,558	19.1
Chemicals	2,404	3,241	34.8	8,965	11,623	29.6
Animals and animal products	2,543	3,092	21.6	na	na	na
Minerals	na	na	na	6,970	8,240	18.2
Precision instruments, clocks	na	na	na	3,440	4,165	21.1
Other	<u>31,331</u>	<u>35,835</u>	14.4	<u>23,517</u>	<u>26,318</u>	11.9
Total	93,049	111,688	20.0	85,349	103,572	21.4

na=not available

Source: China Economic News Service

On the import side, note that Taiwan is a major importer of chemicals, running a large trade deficit despite its large petrochemical production base. Large imports of minerals reflect Taiwan's lack of mineral resources, particularly petroleum and coal.

Taiwan also conducts a substantial trade in services, such as insurance, transportation, travel, and trading. In 1994, service exports amounted to \$13.5 billion, with imports of \$20.9 billion leading to a substantial deficit in service trade.<sup>52</sup> The trade gap reflects the still uncompetitive nature of many of Taiwan's service industries. To some extent, it may also reflect the ROC's continuing prohibition against direct commerce with the mainland.

Taiwan's export processing zones (EPZs) played an important early role in the development of its exports. Some 209 foreign manufacturers are located in the three EPZs,

<sup>52</sup> See Central News Agency, May 7, 1996, 87.



at Kaohsiung, Nantze, and Taichung. The zones provide for duty-free imports of materials for processing, with the output reexported. In 1996, the EPZs may account for around \$6 billion in exports based on roughly \$4 billion in imported materials. Electronics products dominate the EPZs, accounting for some 82 percent of exports during the first quarter of 1996. The primary recipients of these exports are the U.S. and Japan, whose shares amount to 27 and 20 percent, respectively.<sup>53</sup>

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<sup>53</sup> See Central News Agency, February 16, 1996, 188; April 13, 1996, 105; and April 21, 1996, 205.

## IV. TAIWAN WITHOUT MAINLAND TIES

Chapter 1 introduced the proposition that Taiwan might be forced to choose between terminating all economic ties with the mainland and unifying with the mainland as a SAR under PRC authority. This chapter explores the first alternative, surviving without mainland ties.

### A. SEPARATION SCENARIO SUMMARY

Chapters 2 and 3 have documented the substantial economic ties that have developed between Taiwan and the mainland, even as political relations between the ROC and the PRC have remained virtually nonexistent. Taiwan's businessmen value these ties so much that many of them invested and traded with the mainland even when the ROC government prohibited it. Terminating the ties and separating the two economies would eliminate valuable economic opportunities and, in that sense, leave Taiwan worse off.

#### 1. Initiation of Scenario

Despite its drawbacks, separation might occur. On the one hand, the PRC might use separation to coerce the ROC into unifying on the PRC's terms. On the other hand, the ROC might institute separation as a defensive move to reduce long-term vulnerability to coercion from an increasingly hostile PRC government. In either case, the decision to terminate would probably be made in the context of a crisis involving highly provocative acts by one side or the other. Separation initiated by the PRC would be more effective since the PRC would be active in enforcing the embargo. This would contrast with the PRC's actions during the early 1980s when it actively encouraged and helped Taiwanese businessmen violate the ROC government's prohibitions on trade and investment.

Whether the PRC would in fact risk the loss of cross-strait ties is problematic. As discussed in Chapter 1, those ties are mutually beneficial. Moreover, if the PRC did deliver an ultimatum to the ROC, it could not be certain that the ROC would choose unification as a SAR rather than complete separation. Hong Kong's *South China Morning Post*, for example, recently reported on a study of cross-strait economic ties by the PRC's Taiwan

Affairs Office.<sup>1</sup> The study concluded that a unilateral cutoff of economic ties would not yet cripple Taiwan's economy. PRC President Jiang Zemin reportedly hopes to deepen Taiwan's dependence on the mainland so that eventually Taiwan will be forced to accept unification on the PRC's terms.

At some point, if the PRC is sufficiently provoked or if Taiwan appears vulnerable, the PRC may well threaten to cut off economic relations. Enforcement of a ban on all trade and investment, however, would be difficult. As discussed in Chapters 2 and 3, Taiwanese businessmen have been creative in finding ways around the ROC's prohibitions and limitations on cross-strait commerce. Their efforts succeeded, in part, because the PRC aided and abetted them.<sup>2</sup> Under a separation scenario initiated by the PRC, the mainland's government would actively try to block cross-strait commerce. For example, incoming FDI that was discovered to have Taiwanese origins might be subject to expropriation. Tracing those origins will be easier after July 1, 1997, when the PRC will control Hong Kong, through which most cross-strait commerce currently flows.

## **2. Short-Run Losses**

In the short run, separation would impose certain adjustment costs on Taiwan. Many businesses would suffer a capital loss as their assets on the mainland became economically useless and their mainland markets were closed. Even if the PRC did not expropriate Taiwan-invested factories, those plants would nevertheless have little value if they could not acquire production materials or sell their output. Similarly, companies in Taiwan would find themselves with excess capacity and inventories. The termination of trade and investment ties would create uncertainties and losses that would work their way through Taiwan's economy. Prices for stocks and real estate would drop, capital would flee the country, and consumers and investors would rein in their spending. Foreign investors, too, would back away, and foreign buyers would switch their purchases to more stable sources.

While losses would be traumatic for many businesses, the macroeconomic situation would eventually stabilize. For example, exports to the mainland represented 16 percent of Taiwan's total exports in 1995, a significant share but still a minority of total exports. A

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<sup>1</sup> See Central News Agency, August 24, 1996, 388-89.

<sup>2</sup> For this reason, it is questionable how effectively the ROC could enforce a separation scenario that it might choose to initiate.

cutoff of imports from the mainland, which supplied 3 percent of Taiwan's total imports, would be even less significant overall.

A loss of Taiwan's foreign direct investment (FDI) on the mainland would similarly be traumatic to individuals but would have a relatively small impact overall. While the PRC has reportedly approved a cumulative total of \$28.3 billion in Taiwanese FDI to the mainland, less than half of that amount has actually been invested, and some portion of the investment has already been returned in the form of repatriated profits. A capital loss of, say, \$14 billion in mainland FDI would be important yet not fatal for an economy that, in 1995, had \$474 billion in deposits at financial institutions and companies worth \$187 billion listed on its stock exchange.<sup>3</sup> Moreover, the annual flow of profits from mainland investments back to Taiwan was surely less than \$3 billion, whereas the flow of funds into domestic investments totaled \$63.5 billion in 1995.

The potential for short-run losses is discussed further in Section B, below. That section recounts the impact of cross-strait tensions on Taiwan's economy during 1995 and early 1996.

### **3. Economic Restructuring**

While a separation scenario would initially be painful for Taiwan, its economy would eventually stabilize and begin to restructure to compete in a world without mainland ties. Companies in labor-intensive light industries would try to replace lost mainland factories with production in Southeast Asia and elsewhere. Their efforts would help the factories in Taiwan that had previously exported production materials to Taiwan-invested factories on the mainland.

But Taiwan might lose more than its economic ties with the mainland. More broadly, the PRC might institute an economic boycott, pressuring countries around the world not to do business with Taiwan.<sup>4</sup> It is arguable how effective such a boycott would be since economic ties with Taiwan are important for many countries and it would be difficult for the PRC to monitor many economic transactions. However, some countries that are particularly dependent on the PRC could be pressured into cooperating. For

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<sup>3</sup> See Central News Agency, February 19, 1996, 198, and July 24, 1996, 383.

<sup>4</sup> Kreisberg (1993), 85-86, calls a boycott of this type a soft sanction, differentiating it from hard sanctions such as a blockade.

example, some countries rely on the PRC for economic and military aid.<sup>5</sup> Others are intent on penetrating the mainland's large, rapidly growing market.<sup>6</sup> Moreover, some transactions are relatively easy to monitor, such as the signing of an unofficial economic agreement with Taiwan or approval for a major FDI project from Taiwan. The PRC would have an opportunity to protest and perhaps block many such transactions. Section C, below, describes the PRC's attitude toward Taiwan's global economic relations, including examples of protests and boycotts.

Achievement of Taiwan's long-term development goals would be partially blocked by economic separation from the mainland. As described in Section D, below, the ROC has ambitions to make Taiwan a hub and operations center for the Asia-Pacific region. Taiwan would develop financial, shipping, and other business services and would play a role similar to that currently played by Hong Kong and Singapore. However, using Taiwan as a hub will make little sense to multinational corporations who want to do business with the mainland.<sup>7</sup> They will be unable to support PRC business from Taiwan and may even be blackballed by the mainland for operating in Taiwan.

Taiwan also aims to restructure its manufacturing sector in the direction of high-technology industries. It has already developed a global leadership position in the manufacture of components for personal computers and has embarked on a major expansion of its semiconductor capacity. Increasingly, however, Taiwan's position in personal computers depends on low-wage labor on the mainland and in Southeast Asia to perform labor-intensive assembly tasks. The vertical division of labor may leave the high-paying, value-added jobs in Taiwan, but it depends on access to low-wage labor markets. Under the separation scenario, the PRC would block access to the mainland's labor market and attempt to block access to Southeast Asia's labor as well.

Furthermore, Taiwan's position in high-technology industries depends to a considerable degree on imported technology, often provided in conjunction with inward

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<sup>5</sup> Myanmar, for example, is heavily dependent on the PRC for aid and military supplies. Myanmar also bans direct trade and investment with Taiwan. See Central News Agency, March 12, 1996, 127, and August 11, 1996, 171.

<sup>6</sup> The mainland's overall imports caught up with Taiwan's overall imports in 1990 and were almost 28 percent higher than Taiwan's by 1995. Sales to the local market from foreign-invested factories are much more significant on the mainland than in Taiwan. The relative importance of the mainland's market will increase as its economy continues to grow faster and as market access is liberalized.

<sup>7</sup> Initial uncertainty under the separation scenario will cause many foreign companies to suspend business plans for both Taiwan and the mainland, at least until the situation stabilizes. Thereafter, they may be forced to choose one location or the other.

FDI by foreign multinationals. These same ties often provide customers for Taiwan's output, as described for the semiconductor industry in Section D, below. However, under the separation scenario, the multinationals may well lose confidence in Taiwan's long-term viability and shift their FDI and their orders elsewhere. This would particularly be the case if the PRC actively prosecutes a boycott of Taiwan since most of the multinationals will also hope to do business on the mainland.

#### **4. Evaluation**

The themes highlighted above are discussed in detail in the sections below. On balance, it is apparent that the ROC would have difficulty realizing its current development objectives. Most troublesome is the prospect that the mainland would institute an economic boycott and have some success prosecuting it. While Taiwan could survive such a boycott, it would also be hurt by it. It cannot be taken for granted that Taiwan could continue to improve the standard of living of its citizens or even maintain the current standard.

A stagnating Taiwan would begin to lose its capitalists as they established companies elsewhere to do business where opportunities were brighter, perhaps even on the mainland. Similarly, Taiwan would begin to lose its talent, especially its scientists and its bright students studying abroad.<sup>8</sup> Stagnation of the economy would also make it more difficult for the ROC to finance military modernization, eventually bringing into question its ability to deter the use of force by the PRC.

While Taiwan would find a way to survive under the separation scenario, there would be some dark clouds hanging over its prosperity. It is certainly not a scenario many in Taiwan would freely choose.<sup>9</sup>

### **B. TENSIONS IN 1995 AND 1996**

#### **1. Background**

In August 1995 and again in March 1996, the PRC conducted military exercises near Taiwan that were widely interpreted as threatening. The PRC seemed to be reminding

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<sup>8</sup> An amazing 140 out of 180 members of Academia Sinica, the ROC's most prestigious scientific advisory group, are already residents of the United States. Moreover, the majority of the ROC's overseas students reportedly do not return to Taiwan. On the other hand, opportunities for growth in the Hsinchu Science-based Industrial Park have attracted a number of talented Taiwanese back from the U.S. See Central News Agency, August 5, 1996, 54; Suttmeier (1993), 199; and Sung (1993), 318.

Taiwan that it could, and if provoked would, blockade or invade Taiwan. Taiwan was not attacked, but it nevertheless suffered certain economic losses as a result of the threats. These included capital flight; pressure on stock market prices and the value of Taiwan's currency; and possible negative impacts on trade, inward FDI, and domestic spending. This period may thus provide a mild taste of the disruption that could result if cross-strait economic ties were permanently cut.

The People's Liberation Army (PLA) exercises were seemingly triggered by President Lee Teng-hui's visit to the U.S. June 7–12, 1995, to speak at his alma mater, Cornell University. The PRC objected vociferously because the unofficial visit nevertheless conferred a degree of recognition on Lee, in violation of the PRC's one-China policy. Moreover, the PRC claimed the visit furthered Lee's unspoken intention to declare Taiwan's independence. A subsequent June visit by Premier Lien Chan to Europe was interpreted similarly.

In apparent reaction to the Lee and Lien visits, the PLA conducted ballistic missile exercises in the Taiwan Strait July 21–26, 1995, and August 15–25, 1995.<sup>10</sup> In July, six missiles (with dummy warheads) were fired into an area 140 kilometers north of Taiwan. In August, missiles were fired into an area 136 kilometers north. Then, in February and March of 1996, the PLA held a series of three exercises near the Taiwan Straits, including live-fire mock invasions of coastal islands. The exercises held Taiwan's attention until their completion on March 25th. Particularly riveting was the firing of four ballistic missiles between March 8th and March 13th. This time the target zones were much closer, with one located only 20 nautical miles northeast of Taiwan's Keelung port and another only 30 nautical miles southwest of the port of Kaohsiung.<sup>11</sup> The message of intimidation was unmistakable, especially given the continuous stream of criticism the PRC had aimed at Lee since his June 1995 visit.<sup>12</sup> Many observers believed that the 1996 exercises were particularly aimed at influencing voters in the ROC's first presidential election by popular vote, held on March 23rd.

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<sup>9</sup> Some advocates of independence for Taiwan distrust mainland ties and have attempted to halt or slow down their development. See Hsieh (1995), 137.

<sup>10</sup> See *Free China Journal (Politics)*, March 8, 1996, 236.

<sup>11</sup> The two ports handle some 70 percent of Taiwan's foreign trade. See Central News Agency, March 8, 1996, 83, and March 13, 1996, 138. The missiles were M-9s, modeled on Russian SCUDs, with a maximum range of 600 kilometers.

<sup>12</sup> To demonstrate its own interest in a peaceful resolution of the reunification issue, the U.S. sent two aircraft carriers, the *Independence* and the *Nimitz*, into the vicinity to observe the exercises.

## 2. Financial Reactions

The stock market sometimes responds to crises in the way expected. The price index for the Taiwan Stock Exchange plunged in July and August 1995 and finished the year down some 30 percent.<sup>13</sup> On March 5, 1996, after the PRC announced its forthcoming missile exercise, the index fell 62.49 points or 1.3 percent. This time, however, the government was ready. On February 23rd it had put together a \$7.27 billion fund to intervene in the stock market and stabilize prices.<sup>14</sup> The fund may have helped since the market rose 5.4 percent during the exercise period, from 4,809.02 on February 23rd to 5,067.51 on March 25th.

The flow of capital in and out of Taiwan provides another sensitive indicator of tensions. During the third quarter of 1995, which included the July and August missile firings, the ROC experienced a \$6.5 billion deficit in its balance of payments.<sup>15</sup> The deficit was based on outflows of \$8.15 billion in short-term capital and \$1.28 billion in remittances by private citizens to overseas bank accounts, with these outflows partially offset by a current account surplus and an inflow of long-term capital. Aside from the balance of payments deficit, some \$3 billion in local deposits were converted from the local currency to U.S. dollars. These outflows have been attributed to tensions with the mainland as well as the depreciation of the New Taiwan dollar. Capital flight recurred in March 1996, when the PLA fired missiles even closer to Taiwan. During that month alone, capital outflow amounted to some \$7.9 billion, including \$2.2 billion in FDI, \$4 billion in short-term securities investments, and \$1.2 billion in cash and other forms.<sup>16</sup> Foreign currency deposits at local banks rose over the entire period, from \$4.6 billion in June 1995 to \$7.9 billion by December 1995, and from \$8.3 billion in January 1996 to \$9.8 billion in April 1996.<sup>17</sup>

Capital flight, and the conversion of local deposits to U.S. dollars, put great pressure on the price of the New Taiwan dollar. The Central Bank of China intervened in

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<sup>13</sup> In addition to tensions with the mainland, a series of financial scandals depressed the stock market in 1995. See *Free China Journal (Business)*, December 22, 1995, 46-47.

<sup>14</sup> See *Free China Journal (Economy)*, March 1, 1996; and Central News Agency, February 23, 1996; and March 26, 1996.

<sup>15</sup> See *Free China Journal (Economy)*, November 10, 1995, 39, and December 1, 1995, 56-57. The balance of payments deficit, however, did not exceed the \$6.88 billion deficit experienced in the second quarter of 1990, a time of domestic political turmoil.

<sup>16</sup> See Central News Agency, June 6, 1996, 92.

<sup>17</sup> See *Free China Journal (Economy)*, March 15, 1996, 138, and Central News Agency, July 30, 1996, 399-400. These deposits have continued to climb, to \$11.3 billion in June 1996.



the foreign exchange markets in an attempt to stabilize the currency and, as a result, drew down the ROC's ample foreign exchange reserves. From the record high of \$100.4 billion in June 1995, the ROC's official reserves dropped to \$90.3 billion by December 1995. By the end of March 1996, reserves had fallen to \$82.5 billion. By August 1996, however, part of this cumulative \$17.9 billion drop had been recovered as reserves rose again to \$93.0 billion.<sup>18</sup> Intervention by the Central Bank of China helped hold the depreciation of the New Taiwan dollar to only 5.2 percent from June 1995 to the end of March 1996, with most of that occurring in 1995.<sup>19</sup>

### 3. Reactions of Economy

During 1995 and 1996, Taiwan experienced its version of a recession, with economic growth rates falling below expectations even though they remained high in global terms. Tensions with the mainland contributed to the recession by shaking the confidence of domestic consumers and investors as well as foreign buyers, bankers, and investors. Other factors unrelated to the tensions also contributed to the recession, including domestic financial scandals, a real estate glut that devastated the construction industry, depreciation of the Japanese currency, and trade policy changes by the PRC.<sup>20</sup> This section attempts to trace how the tensions worked to damage Taiwan's economy, although that admittedly is only part of the story.

Economic growth was originally forecast to be 6.62 percent (for GNP) in 1995, but actual growth was only 6.06 percent.<sup>21</sup> Similarly, the government forecast growth for 1996 at 6.36 percent, but that projection seems unlikely given that growth was only 5.31 percent in the first quarter and 6 percent in the second.<sup>22</sup> Growth has been particularly sluggish for private consumption, which rose only 5.4 percent for the year.<sup>23</sup> Domestic

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<sup>18</sup> Data derived from Central News Agency, various dates.

<sup>19</sup> See Central News Agency, April 21, 1996, 203.

<sup>20</sup> For example, embezzlement and fraud scandals in July and August 1995 led to a \$6.2 billion run on local-level financial institutions, making it harder for smaller firms to obtain loans. See *Free China Journal (Politics)*, January 6, 1996, 155.

<sup>21</sup> See *Free China Journal (Economy)*, August 25, 1995, 3, and Central News Agency, May 15, 1996, 234. An unanticipated surge in exports helped keep the margin of error as small as .56 percent.

<sup>22</sup> See Central News Agency, May 27, 1996, 465-66.

<sup>23</sup> See Central News Agency, April 17, 1996, 149, and August 5, 1996, 51-52. In the third quarter, with GDP growth of 4.6 percent, motorcycle and automobile sales were down 15 percent. See *Free China Journal (Business)*, December 1, 1995, 35-37. In the first half of 1996, automobile sales were down 20 percent.

investment was also below expectations, with the value of new factory registrations below the prior year by 28 percent in October 1995, 53 percent in November 1995, and 70 percent in January 1996.<sup>24</sup> In the first half of 1996, industrial investment reached only 18.1 percent of GDP, far short of the government's target of 23 percent.<sup>25</sup> In short, tensions with the mainland damaged the confidence of consumers and investors, causing them to restrain spending and thereby exacerbate the other problems of the economy.

Taiwan's exports grew a strong 20 percent in 1995, thanks in part to the appreciation of the Japanese yen. It is not surprising, then, that exports grew only 8.3 percent in the first half of 1996, especially since the yen had depreciated by then. Exports to Hong Kong and the mainland grew by 22.9 percent in 1995 but fell by 3.9 percent in the first half of 1996. While this decline suggests that tensions may have affected cross-strait trade, it might also have been caused by certain policy changes on the mainland.<sup>26</sup> A number of anecdotes, however, do suggest that foreign buyers were concerned about the tensions. For example:

- Taiwan's First International Computer reported that some major clients were reluctant to place new equipment orders in March 1996.<sup>27</sup>
- Some foreign buyers switched orders from Taiwan-invested factories on the mainland to other countries, causing mainland orders for Taiwanese textiles to decline.
- European banks reportedly were reluctant to commit loans to clients intent on buying ships from Taiwan, causing the suspension or cancellation of orders for at least six ships (versus annual output of 20) from Taiwan's China Shipbuilding Corporation.<sup>28</sup>

The tensions also seem to have discouraged both Taiwanese FDI to the mainland and foreign FDI to Taiwan. The number of new mainland FDI projects approved by the ROC's Investment Commission dropped from 934 in 1994 to only 490 in 1995, with the

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<sup>24</sup> See *Free China Journal (Business)*, April 12, 1996, 154-55.

<sup>25</sup> See Central News Agency, August 5, 1996, 51-52.

<sup>26</sup> The PRC reduced the drawback rate on exports in January 1996, causing many Taiwanese to rush supplies to their mainland factories before the deadline. Other changes that may have hurt Taiwan's exports to the mainland include an incremental tax on imports and cancellation of tax preferences for foreign investors. See *Free China Journal (Economy)*, January 6, 1996, 87, and May 10, 1996, 181. Another factor that cannot have helped was the reduction by the U.S. of its quotas for the import of textiles and shoes from the mainland. See *Free China Journal (Business)*, February 16, 1996, 84.

<sup>27</sup> See Central News Agency, March 18, 1996, 183.

<sup>28</sup> See Central News Agency, March 21, 1996, 228.

average number of applications per month dropping sharply starting in July 1995.<sup>29</sup> Moreover, 25 companies withdrew their applications from the Investment Commission, and another 121 reportedly shelved projects that had already been approved.<sup>30</sup> From January to April 1996, the number of mainland projects proposed dropped again, from 157 in 1995 to 138 in 1996, while the aggregate value rose by 9 percent.<sup>31</sup>

Inward FDI approved by the Investment Commission rose 80 percent in 1995 but reportedly tapered off during the second half.<sup>32</sup> For the first half of 1996, inward FDI was down 16.4 percent, with commitments down 51 percent from the U.S. and even more from Hong Kong and Europe. Japan, however, resisted the trend, increasing its commitment by 20 percent over 1995.<sup>33</sup> Overall, FDI increased by 42 percent for the electronics industry and 43 percent for finance and insurance, down from increases of 490 percent and 281 percent, respectively, in 1995.

Tensions with the mainland thus seem to have helped slow Taiwan's economic growth, primarily by generating uncertainty in the minds of Taiwanese consumers and investors.<sup>34</sup> The capital flight discussed in the previous section also provides a vivid indication of that uncertainty. More worrisome, however, is the decline in approved inward FDI, which could damage Taiwan's competitiveness in the future.

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<sup>29</sup> The number of applications dropped from 50 to 60 per month for the first half to 20 to 30 thereafter. The overall value of proposed projects rose 13.3 percent, however, suggesting that it was mainly small- and medium-sized investors who were affected. See Central News Agency, March 6, 1996, 49; *Free China Journal (Economy)*, October 13, 1995, 19; and *Free China Journal (Business)*, February 16, 1996, 82-83.

<sup>30</sup> For example, TECO Electric and Machinery Group has invested throughout Southeast Asia and has some \$12 million invested on the mainland. Because of the March 1996 tensions, TECO reportedly held back another \$4 million in investments planned for Shanghai and Fuzhou. See Central News Agency, March 20, 1996, 212.

<sup>31</sup> See *Free China Journal (Economy)*, May 17, 1996, 190.

<sup>32</sup> See *Free China Journal (Business)*, December 22, 1995, 46-47.

<sup>33</sup> See *Free China Journal (Business)*, July 19, 1996, 157-58, and *Taiwan Economic Daily News*, July 11, 1996, 571.

<sup>34</sup> The crisis had some local effects on the mainland as well. In Fujian Province, for example, tourism was hurt and some workers left the area to avoid potential hostilities. See Central News Agency, March 1, 1996, 2.

## C. ECONOMIC BOYCOTT

The PRC and the ROC have contended over the years for diplomatic recognition, with each refusing to recognize countries that recognize its rival.<sup>35</sup> The two have used economic and other leverage to fight this diplomatic war. Both sides have provided economic aid to induce countries to recognize them. The PRC has also become increasingly adept at using access to its potentially huge domestic market as a weapon. However, while the PRC is quick to protest when countries offer any semblance of official recognition to the ROC, the PRC has been quite tolerant of unofficial economic relations. In a new PRC-ROC cold war, however, this might change. The PRC might actively try to disrupt Taiwan's economic relations by punishing countries that engage in such ties.<sup>36</sup> This section explores that possibility.

### 1. Current PRC Policy

The PRC strenuously objects to any kind of official recognition of ROC sovereignty. The PRC has also declared that it does not object to unofficial economic and cultural relations between Taiwan and foreign countries.<sup>37</sup> The distinction between official and unofficial relations is not always clear, however, and the PRC and ROC have engaged in a continuous struggle to test the boundaries. The PRC protests when it feels the boundary is being pushed but often tolerates situations it finds objectionable. The ROC constantly probes for opportunities to expand the substance and official connotation of its unofficial relations.<sup>38</sup> The character of Taiwan's unofficial relations varies among countries, with some ties, e.g., with the U.S., being only thinly disguised official relations. Over the years, as Taiwan's economic importance has increased, it has been able to increase the substantive nature of its unofficial ties.

In 1991, Taiwan had unofficial representative or trade offices in 55 countries, and 30 countries had unofficial offices in Taiwan. By June 1996, Taiwan had offices in 64

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<sup>35</sup> The ROC, which is recognized by only 30 countries, would now tolerate dual recognition, but it does not consider that to be its policy. In any case, the PRC would not accept dual recognition. See Gu (1995), 115-16, and Central News Agency, June 3, 1996, 33.

<sup>36</sup> This possibility is discussed in Kreisberg (1993), 85-86, where it is doubted that many Asian countries would observe a PRC boycott against Taiwan.

<sup>37</sup> See Clough (1993), 119-20.

<sup>38</sup> The PRC's power to interfere is limited and its clout varies from country to country. See Clough (1993), 119-20.

countries and at least 42 countries had offices in Taiwan.<sup>39</sup> Some offices offer full consular services, e.g., in Sweden and Canada, although most European offices do not. The PRC seemingly tolerates anything short of formal diplomatic relations, although it is adamant that the name of the representative office not imply recognition of ROC sovereignty. The names thus often refer to the city of Taipei rather than Taiwan.

Another sensitive point for the PRC is the level of contact between officials of the ROC and other countries. The ROC seeks to make contact at the highest possible level, so as to connote foreign recognition of its sovereignty, while the PRC protests in order to reduce the level. In January 1991, for example, France's Minister of Trade and Territorial Development led an unofficial delegation to Taiwan in search of infrastructure contracts from the ROC government. The PRC protested, but France followed up with another delegation headed by its Secretary of State for Foreign Trade.<sup>40</sup> The PRC also protested when Australia's Minister of Primary Industries led an August 1996 business delegation to Taiwan.<sup>41</sup> The highest contact currently allowed by the policy of the United States is at the level of subcabinet economic officials. Thus, Larry Summers, the Deputy Secretary of the Treasury, led a multiagency delegation for economic talks in Taiwan in September 1996, with the ROC's Vice Minister of Economic Affairs acting as co-host.<sup>42</sup>

## **2. PRC Policy in Practice**

This section includes several examples of PRC reaction to Taiwan's economic relations with other countries.

A 1996 flirtation between North Korea and Taiwan illustrates how the PRC may tolerate economic ties while guarding against infringements against its one-China policy.<sup>43</sup> The Democratic People's Republic of Korea (DPRK) and the ROC have begun exploring the establishment of economic ties; however, the PRC reportedly leaned on the DPRK to cancel a proposed 1995 unofficial visit from the ROC's Vice Minister of Economic Affairs. In April 1996, the DPRK established an authorized tourism office in Taipei to issue

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<sup>39</sup> See Clough (1993), 102; Central News Agency, May 24, 1996, 420; and June 28, 1996, 435; and *Yearbook of the Republic of China* (1996).

<sup>40</sup> See Clough (1993), 107.

<sup>41</sup> See Central News Agency, August 8, 1996, 113.

<sup>42</sup> See Central News Agency, June 20, 1996, 318, and August 17, 1996, 269.

<sup>43</sup> See Central News Agency, March 31, 1996, 331; June 10, 1996, 320-21; and June 24, 1996, 359. See also *Taiwan Economic Daily News*, July 15, 1996, 583.

visa-like certificates to enable tourists and businessmen to visit North Korea. But when the ROC reportedly offered 200,000 tons of food aid to the DPRK, PRC Foreign Minister Qian Qichen strongly objected, promising to increase the PRC's own aid to the DPRK instead. A DPRK trade official nevertheless subsequently paid an unofficial visit to the ROC's Ministry of Economic Affairs to promote Taiwanese investment in the DPRK. Perhaps because of its special position as the DPRK's only ally, the PRC is especially wary of ties between the DPRK and Taiwan.

The case of Russia and Taiwan offers a similar example. They agreed in a June 1992 memorandum of understanding (MOU) to exchange liaison offices and economic and cultural coordination commissions. Taiwan's representative office was established in Moscow on July 12, 1993, but Russia has not yet opened its office in Taipei. A number of domestic factors may account for the delay, but Russia also has apparently been concerned that it not offend the PRC. Prospects for the office may be improving since Russia reportedly notified the PRC about establishing unofficial ties with Taiwan and received no objection. At the same time, Taiwan is pressuring Russia by refusing to sign agreements for direct air flights and investment guarantees until the Taipei office opens.<sup>44</sup>

The PRC is also willing to tolerate Taiwan's membership in the Asia-Pacific Economic Cooperation (APEC) forum, under the name Chinese Taipei.<sup>45</sup> Both sides are participating in APEC-related working meetings in both Taiwan and the mainland. However, the PRC applied strong pressure to prevent President Lee Teng-hui from attending APEC's three summit meetings since that would have conferred a certain political recognition on Lee. Instead, Taiwan has been represented by the chairman of its Council for Economic Planning and by the chairman of the unofficial Straits Exchange Foundation.

The PRC similarly was willing that Taiwan be admitted to the GATT (now the WTO) as a separate customs territory. However, the PRC insisted that Taiwan use the name Chinese Taipei and that its own application to the GATT be accepted first.<sup>46</sup>

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<sup>44</sup> See Central News Agency, May 13, 1996, 194, 198-99, and July 19, 1996, 299.

<sup>45</sup> See *Free China Journal (Politics)*, November 24, 1995, 79, and January 6, 1996, 156. In an earlier age, the PRC forced Taiwan to withdraw from the International Monetary Fund and the World Bank in 1980. Only U.S. financial pressure prevented the Asian Development Bank from similarly forcing Taiwan to withdraw when the PRC was admitted in 1985. See Wu (1994), 184ff.

<sup>46</sup> See Chiou (1994), 38-39.

Aviation agreements constitute an area that is particularly sensitive to the PRC.<sup>47</sup> Agreements on flights between countries is traditionally a governmental prerogative.<sup>48</sup> Moreover, many airlines around the world are government-owned, reinforcing the governmental character of aviation agreements.<sup>49</sup> The PRC thus has objected in the past to allowing a single airline to serve both the mainland and Taiwan. In the 1970s, it forced Japan Airlines to establish a subsidiary, Japan Asia Airways, to fly to Taiwan while Japan Airlines was allowed to fly to the mainland. The PRC seems to be losing this skirmish, however, with Taiwan completing aviation agreements with Canada in 1990 and with Australia and New Zealand in 1991. United Airlines of the U.S. flies to both the mainland and Taiwan. Most recently, the PRC itself has accepted agreements on flights between Taiwan and Hong Kong and between Taiwan and Macao. Under these agreements (among airlines), certain mainland-invested airlines will fly from Taiwan to Hong Kong or Macao, and then continue on to the mainland with the same aircraft.<sup>50</sup>

### **3. Economic Agreements**

Bilateral economic agreements play a key role in enabling trade and investment relationships to prosper. Negotiating such agreements, however, is a particular problem for an economy whose government is not recognized by other governments. Taiwan has addressed this problem by moving into the gray area of unofficial agreements and agreements between unofficial organizations. The PRC often protests but seems to tolerate these agreements so long as they do not too explicitly connote a recognition of ROC sovereignty. The agreements are sometimes signed by the unofficial representative offices of Taiwan and the other country. On other occasions, they are signed by organizations such as a chamber of commerce or an association for trade promotion.<sup>51</sup>

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<sup>47</sup> See Clough (1993), 108–9.

<sup>48</sup> The ROC seems to agree that aviation agreements are governmental, implying a recognition of sovereignty. It has signed agreements with Saint Lucia, Latvia, Bulgaria, Belgium, and Costa Rica that no airline wants to use. See Central News Agency, July 17, 1996, 259.

<sup>49</sup> The PRC was able to block flight agreements for Taiwan's China Airlines, which is government-owned, in part because its aircraft carried the ROC flag on their tails. The airline is now in the process of replacing the flag with a plum blossom. See *Free China Journal (Business)*, October 13, 1994, 10.

<sup>50</sup> See Central News Agency, June 8, 1996, 132–33.

<sup>51</sup> See Chen Hurng-yu (1994), 129.

One key type of agreement is the agreement on the protection of investment. While some companies are willing to risk sending FDI to a country that is not covered by an agreement, others insist that one be in place. Investment agreements provide some protection against expropriation and also attempt to lay out the ground rules for how investors will be treated. As noted in Chapter 2, Taiwan had signed investment protection agreements with most of the ASEAN countries by April 1996, including Indonesia, Malaysia, the Philippines, Singapore, and Vietnam, and it planned to sign one with Thailand in the near future. In September 1994, Taiwan signed a Trade and Investment Framework Agreement with the U.S.<sup>52</sup>

Countries are often wary of PRC objections and hence reluctant to sign investment protection agreements with Taiwan. For its part, Taiwan reportedly is willing to use economic pressure to expedite the negotiations. For example, Malaysia was reluctant to negotiate an agreement despite the fact that Taiwan was one of its largest sources of inward FDI. ROC officials were publicly critical and threatened to advise businessmen not to invest in Malaysia. An investment agreement was then concluded on February 18, 1993.<sup>53</sup> Similarly, Australia resisted signing economic agreements with Taiwan, fearing they would be too official for the PRC's taste. Then, Taiwan's state-owned China Steel floated a proposal to build a \$2.5 billion steel complex, possibly in one of the Australian states. This reportedly encouraged Australia to pass an act guaranteeing protection of investments from unrecognized states and governments such as Taiwan.<sup>54</sup>

Another important type of agreement is the Agreement on the Avoidance of Double Taxation and Tax Evasion. Such an agreement protects investors by limiting attempts by the host governments to overtax them and by laying out transparent ground rules. Taiwan has now signed comprehensive tax agreements with Singapore, Malaysia, Indonesia, Vietnam, Australia, South Africa, Paraguay, and Poland.<sup>55</sup> It has more narrow agreements with Netherlands, Thailand, Luxembourg, United States, Germany, Japan, Sweden, Norway, South Korea, and European Union.

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<sup>52</sup> See Central News Agency, April 5, 1996.

<sup>53</sup> See Chen Hurng-yu (1994), 129.

<sup>54</sup> See Klintworth (1994), 287-88. Taiwan also reportedly instituted a ban on imports of Australian beef to expedite negotiations over direct air links.

<sup>55</sup> See *Free China Journal (Economy)*, December 1, 1995, 61; and Central News Agency, May 29, 1996, 510; and July 23, 1996, 372.



#### 4. Arms Sale Boycotts

The PRC opposes arms sales to Taiwan and has used both political and economic leverage to dissuade countries from making such sales.<sup>56</sup> China's partial success in this endeavor illustrates how it could interfere with Taiwan's foreign commerce in a broader way in a hostile future.

The PRC has had considerable success in preventing the ROC from acquiring modern submarines.<sup>57</sup> The ROC is eager to buy submarines, to counter the PRC force of nearly 60 submarines.<sup>58</sup> The ROC itself currently has only four submarines—two World War II-vintage boats acquired from the U.S. and two modern Swordfish submarines purchased from the Netherlands in 1981 and delivered in 1988 and 1989. Following the 1981 sale, the PRC downgraded its diplomatic relations with the Netherlands and relations remained strained for many years.<sup>59</sup> Then, in February 1992, the Netherlands refused to permit the Dutch company RDM to sell four more submarines to Taiwan.<sup>60</sup> In what Dutch officials acknowledged as a political payoff, the PRC soon signed major procurement contracts totaling some \$1 billion, including three twin-screw dredgers and three additional Fokker aircraft.<sup>61</sup> Even before the question of additional submarines arose, the Dutch had won several lucrative contracts for chemicals, an aluminum project, and seven Fokker aircraft. The Dutch were thus quite aware of the mainland market as they evaluated the proposed submarine sale.

The PRC has also been able to block the sale of German submarines to Taiwan. In 1986, Taiwan ordered 10 submarines from the German shipbuilder Vulkan.<sup>62</sup> The contract amounted to nearly \$7 billion. Vulkan, however, lost \$500 million when the German government canceled the contract in January 1993. The substantive argument for canceling the sale is not clear since the German Economic Affairs Minister recently defended potential

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<sup>56</sup> In addition to the military implications of arms sales, such transactions have a governmental flavor, implying some degree of de facto recognition of sovereignty. See Gu (1995), 110.

<sup>57</sup> See Central News Agency, April 6, 1996, 46.

<sup>58</sup> The ROC reportedly seeks a force of eight modern submarines to counter a PRC blockade and threaten coastal harbors on the mainland. See Wu (1994), 111.

<sup>59</sup> The subject is still touchy. A rumored April 1996 trip by PRC Premier Li Peng to the Netherlands was reportedly canceled because of rumors that the Netherlands might sell Taiwan two submarines it was retiring. See Central News Agency, April 6, 1996, 46.

<sup>60</sup> See Huang and Wu (1995), 252.

<sup>61</sup> See *Journal of Commerce*, May 6, 1993, 4A.

<sup>62</sup> See Central News Agency, March 11, 1996, 114. Another source observes instead that the ROC announced a contract with West Germany for six submarines on June 3, 1989. See Wu (1994), 111.

submarine sales to South Korea by calling them basically defensive weapons. However, in November 1993, German Chancellor Kohl led a business delegation to visit the PRC, securing some \$4 billion in new contracts, including a Siemens contract for the new Guangzhou subway.<sup>63</sup>

The ROC's search for submarines continues, but with no success. For example, ROC officials reportedly visited the Australian Submarine Corporation in 1995, expressing an interest in acquiring its Collin-class submarines. The Australian defense minister blocked any sale since it would jeopardize commercial ties with the PRC.<sup>64</sup> The ROC has also been unsuccessful in its efforts to purchase diesel submarines from the U.S., which reportedly considers submarines to be offensive weapons.<sup>65</sup>

The ROC has been more successful purchasing fighter aircraft in recent years, including 60 Mirage 2000-5 fighters from the French and 150 F-16A/Bs from the United States. The French, however, were taught a lesson by the PRC following the Mirage sale. The agreement to sell the Mirage fighters was concluded in November 1992. Together with 1,200 MICA missiles and other equipment and supplies, the contract is said to be worth \$6 billion.<sup>66</sup> Thereafter, the PRC closed a French consulate in Guangzhou and barred French firms from bidding on Guangzhou subway contracts that Siemens later won. Finally, in a joint communique with the PRC on January 12, 1994, France agreed not to authorize arms sales to Taiwan in the future.<sup>67</sup> France nevertheless will honor its previously signed contracts.<sup>68</sup>

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<sup>63</sup> PRC leader Jiang Zemin reportedly asked Kohl during the visit to promise not to sell arms to Taiwan in the future. See Yeh (1995), 66. While Germany might seem to have traded a \$7 billion contract for \$4 billion in new contracts, the \$7 billion project would have taken a decade or more to complete while German companies now have an improved ability to seek contracts for \$4 billion or more every year.

<sup>64</sup> See Central News Agency, May 17, 1996, 291.

<sup>65</sup> See Central News Agency, August 19, 1996, 285-86.

<sup>66</sup> See Central News Agency, May 17, 1996, 285.

<sup>67</sup> See Central News Agency, February 9, 1996, 89. Somewhat belatedly, France's foreign minister commented: "Where is France's interest? Is it betting on a country with 20 million people or on a country of 1.3 billion people. For me, the choice is perfectly clear." See *Far Eastern Economic Review*, December 16, 1993, 16.

<sup>68</sup> The French thus will honor contracts to supply spare parts for the Mirages for 10 years and are negotiating for supplies beyond that point. The ROC is concerned about spare parts since the French reportedly suspended parts supplies for guided-missile boats it had sold to Israel, responding to the Arab boycott against Israel. The French will also honor a 1991 contract worth \$3 billion for six Lafayette-class frigate hulls. They will not, however, sell Taiwan the Mistral short-range missiles it has been seeking. See Central News Agency, May 16, 1996, 268; June 12, 1996, 186; and July 6, 1996, 88.

The ROC continues to import weapons, averaging \$800 million in imports per year from 1992 to 1994.<sup>69</sup> At the same time, however, the PRC has been increasingly effective at reducing Taiwan's list of major suppliers, making it ever more dependent on the United States.

## **D. FUTURE DEVELOPMENT**

The ROC's economic strategy for the future has two major thrusts. The first is to develop Taiwan into an island of science and technology, enabling it to produce and export products at the creative, high-paying end of the spectrum. The second thrust is to develop a modern, efficient service economy, able to attract FDI including especially the headquarters operations of major multinational companies. In a new cold war with the PRC, the emphasis in the strategy would have to shift in the direction of high-technology manufacturing. While efficient business services to attract FDI would remain essential, the prospects for succeeding as a regional hub and headquarters site would fade once the vast mainland hinterland was made off limits. This section describes the ROC's approach.

### **1. The Hub Plan**

#### **a. Background**

The ROC has defined a vision of Taiwan as an Asia-Pacific Regional Operations Center in the 21st century.<sup>70</sup> The ROC's action plan outlines steps to be taken to bring the vision into reality by the year 2000. The basic concept is to make Taiwan an attractive place for Taiwanese and foreigners to invest and produce. To achieve this, the ROC must improve its infrastructure and regulatory efficiency. Further, it must liberalize foreign access to its markets and improve and internationalize its services.

The plan envisions Taiwan as an operational hub within the Asia-Pacific region. Taiwan would build on its strategic geographic location and extensive trade and investment ties within East Asia. It would serve as a bridge between Southeast Asia and the mainland and between East Asia and advanced economies elsewhere. While all of this would require major improvements in Taiwan's business and international services sectors, it could

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<sup>69</sup> See Central News Agency, July 4, 1996, 53-54.

<sup>70</sup> The Asia-Pacific Regional Operation Center concept is discussed in *Yearbook of the Republic of China* (1996).

enable Taiwan to play the kind of role that Hong Kong has played for the mainland and that Singapore has played in Southeast Asia. Taiwan could become the regional headquarters for the East Asian operations of both Taiwanese firms and foreign multinational corporations. This role would provide high-value-added jobs in management, marketing and distribution, R&D, design and engineering, and customer service.

#### **b. Planned Activities**

The hub plan lays out the first six activities for which Taiwan should become an operations center: manufacturing, sea transport, air transport, finance, telecommunications, and media.

As a *manufacturing center*, Taiwan would promote an efficient division of labor among itself, the mainland, and Southeast Asia. Taking advantage of its solid industrial foundation, capability for applying science and technology, and high-quality manpower, Taiwan would aim for the high-technology and high-value-added end of the manufacturing spectrum. It would design the products, produce the sophisticated components, and perhaps integrate the complete systems. The mainland and Southeast Asia would perform the assembly work requiring low-wage labor. The action plan to bring this about would include building some 20 to 30 intelligent industrial parks, in cooperation with the private sector, with advanced infrastructure to attract high-technology factories. Taiwan would become a science and technology island.

As a *sea transportation center*, Taiwan would take advantage of its geographic position and large ports to become a container and transshipment center for East Asia. Increasingly efficient ports and shipping would enhance Taiwan's role as a regional manufacturing center. However, the present ROC policy prohibiting direct cross-strait transportation is a great source of inefficiency that cannot readily be undone. As noted in Chapter 3, above, the ROC's conditions for permitting direct links amount to a meaningful rapprochement between the PRC and the ROC. As an interim step, the ROC has proposed establishing offshore transshipment centers, whereby foreign ships and ships flying foreign flags of convenience would be allowed to transship (i.e., transfer from one ship to another) cargo through Taiwan provided the cargo did not pass through ROC customs. In addition, the ROC has proposed to establish free economic and trade zones that would allow a free flow of cargo, people, and capital to and from other countries, including the mainland. Investors could build factories in the zones and import the requisite materials without restriction, although normal restrictions on entering the Taiwan economy itself would still apply. The PRC has rejected the ROC proposals as inadequate and instead

recently published its own set of regulations for cross-strait trade to several ports in Fujian Province.

As an *air transportation center*, Taiwan would become a passenger and cargo hub for East Asia, a role that, again, would enhance Taiwan's appeal as a regional operations center for multinational and domestic corporations. The ROC has already taken steps to develop express cargo services at Chiang Kai-shek International Airport, signing agreements with United Parcel Service and Federal Express of the U.S. and beginning construction of a new freight terminal. While this will improve service to a number of points in the Asia-Pacific region, its value is diminished by the prohibition of direct flights to the mainland.

As a *financial center*, the ROC would provide financial services to support the regional operations of domestic firms and foreign multinational corporations. The ROC's huge official reserves, high savings rates, and typical balance of payments surpluses all give it a financial base on which it can build. As a first step, the ROC plans to permit free operational flows through its offshore financial markets. On a more gradual basis, the ROC will liberalize access to its domestic financial markets, expand and internationalize its bond and stock markets, and make regulations and markets more transparent. But while the ROC has relaxed regulations somewhat on indirect cross-strait remittances by its banks, it still prohibits banks from investing on the mainland or establishing branches there.<sup>71</sup> This limits Taiwan's potential effectiveness as a financial center supporting commerce with the mainland.

As a *telecommunications center*, Taiwan would establish world-class performance for a service that is indispensable for regional operations. Currently, telecommunications prices are high and service is inadequate, to the point that Acer, Taiwan's leading computer company, announced it was going to move its global communications center to Hong Kong or Hawaii.<sup>72</sup> The ROC is now reorganizing its telecommunications industry, limiting its Directorate General of Telecommunications to a regulatory role and giving its service provision role to a separate government-owned company that will eventually be privatized.

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<sup>71</sup> The ROC believes that opening bank branches on the mainland would be too risky, since the PRC could readily freeze bank accounts, impairing the health of the banks and their depositors. See *Free China Journal (Economy)*, August 16, 1996, 267.

<sup>72</sup> Acer has already moved its Asia-Pacific financial and marketing base to Singapore, although its headquarters remains in Taiwan. See *Free China Journal (Economy)*, January 19, 1996, 398.

In the meantime, the markets for value-added and mobile services are being opened for private investors, including foreign investors within certain limits.

As a *media* center, the ROC will improve access to information, supporting its role as a regional operations center. It will improve satellite and cable television services and ease access to the mainland for news and for program production.<sup>73</sup> Particular emphasis will be placed on attracting domestic and foreign investment in the production of high-quality television programs and movies. The ROC may be able to play a leading role in Mandarin programming for the region.

### c. Evaluation

The ROC's hub plan provides a good vision to pursue and most of the implementing actions seem necessary for continuing economic development in any case. The prospects for success are less clear since Hong Kong and Singapore are much further along and since other cities from Shanghai to Manila to Bangkok aspire to play a similar role. Hong Kong and Shanghai have a particular advantage in that transshipments from them to the rest of the mainland can be made by land as well as sea.<sup>74</sup>

The key issue, of course, is Taiwan's economic relationship with the mainland. While the ROC has allowed substantive economic ties to develop, it continues to prohibit direct links, FDI from the mainland, many types of FDI to the mainland, and many types of imports from the mainland. These restrictions limit the effectiveness of Taiwan as a potential regional operations center doing business with the mainland.

From the viewpoint of the separation scenario discussed in this chapter, the hub concept is questionable. Under separation, virtually all economic ties to the mainland would be severed, so it is doubtful that many companies doing much business on the mainland would establish their regional headquarters in Taiwan.<sup>75</sup> If the PRC spearheads an

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<sup>73</sup> The ROC plans to lengthen to one year the period during which mainland reporters may be stationed in Taiwan, hoping that the PRC will reciprocate. See Central News Agency, July 16, 1996, 241, 249.

<sup>74</sup> The advantages of shipping by sea to the mainland from Taiwan rather than Southeast Asia are not clear. See Sung (1995), 23.

<sup>75</sup> European firms, for example, have expressed an interest in penetrating mainland markets by allying with Taiwanese firms with their local and ethnic advantages. Britain's ICI, however, has said that the hub plan cannot succeed without direct links. Officials at other multinationals such as American Express and Chase Manhattan Bank have similarly observed that a prolonged impasse in cross-strait relations will deter investment and dim the prospects for the hub plan. Direct links are necessary for Taiwan to be competitive. Even Vice President and Premier Lien Chan has commented that harmonious cross-strait ties are key to the success of the hub plan. See Central News Agency, June 13, 1996, 212; June 29, 1996, 451; July 19, 1996, 301-2; and August 12, 1996, 175.

economic boycott against Taiwan, doing business there would be even more problematic. Access to the mainland is the dominant potential advantage of Taiwan as a regional operations center, and separation would eliminate that advantage.

Most of the activities planned for implementing the hub concept would still be desirable in order to attract both domestic and foreign investment. Indeed, heroic efforts may be necessary under the separation scenario to keep Taiwanese companies from abandoning Taiwan and doing business with the mainland from another base. If the separation scenario causes the ROC to circle the wagons and impose new restrictions on international commerce, it may drive domestic companies away even faster. Similarly, heroic efforts may be necessary to attract FDI to support the high-technology industries on which Taiwan's survival would depend.

In a recent speech to the National Assembly, President Lee Teng-hui warned of the dangers of focusing the hub plan too much on the mainland.<sup>76</sup> Lee made his speech as his government was deliberating the proposal of Formosa Plastics Group (FPG) to invest an unprecedented \$3.8 billion in a power plant on the mainland (see Chapter 2). He said that the government should reexamine the policy of using the mainland as the economic hinterland under the operations center plan. He criticized local entrepreneurs for being preoccupied with direct links and mainland markets and neglecting the domestic investment critical to Taiwan's future competitiveness. Speaking later with local businessmen, Lee amplified that companies should consider the risks to national security and their own interests when contemplating mainland investments.<sup>77</sup> Under the business hub plan, the ROC should give priority first to developing itself as a regional manufacturing and financial center, focusing later on the transshipment center and other activities.

Chi Schive, vice chairman of the Council for Economic Planning and Development (CEPD), which designed the hub plan, reiterated that the essence of the plan is internationalization and liberalization, a global focus rather than a single-minded targeting of mainland markets.<sup>78</sup> Priority now will be on developing Taiwan as a manufacturing and technological research center, a sci-tech island, as well as on liberalizing and internationalizing financial services.

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<sup>76</sup> See Central News Agency, August 19, 1996, 301. Many analysts viewed Lee's speech as a reversal in the ROC's mainland policy or at least a warning to the PRC that the ROC's good will was not unlimited.

<sup>77</sup> See Central News Agency, August 20, 1996, 317.

<sup>78</sup> See Central News Agency, August 15, 1996, 241.

## 2. Sci-Tech Island

Taiwan's real hope for the future under a separation scenario is to become a sci-tech island, producing high-technology products that can compete in the markets of developed countries. This approach could give Taiwan high-paying jobs that do not depend upon access to mainland markets or labor. However, while Taiwan has a solid educational base and some rapidly growing high-technology industries, its R&D capabilities are still limited.

### a. Education

The ROC's educational achievements are impressive. By 1990, the literacy rate was 93.3 percent for people over the age of six. The percentage of school-aged children attending school was 99.9 percent for primary school, 98.7 percent for junior high school, 88.9 percent for senior high and vocational school, and 30.6 percent for junior college and university.<sup>79</sup> In 1994, the ROC had 130 institutions for higher education with over 720,000 students. Moreover, in 1990, nearly 40 percent of students in higher education were enrolled in engineering, mathematics, and computer and natural sciences.<sup>80</sup> The share for engineering students alone exceeded that for Hong Kong, Singapore, Japan, the U.S., and Germany. Overall, the ROC spent 6.6 percent of its 1990 GNP on education, more than Japan or Germany.

### b. R&D Spending

Taiwan's R&D spending is increasing but remains much smaller than in the advanced economies, in both absolute and relative terms. In 1995, Taiwan spent \$4.4 billion on R&D, which amounted to 1.8 percent of its GDP.<sup>81</sup> Spending has increased an average of 18 percent per year in the past decade, and the R&D share has risen from only one percent in 1984.<sup>82</sup> In comparison, the percentage share of R&D in GDP is 2.8 in

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<sup>79</sup> See Kuo (1994), 91, and *Yearbook of the Republic of China* (1996).

<sup>80</sup> See Dahlman and Sananikone (1993), 51. Taiwan is nevertheless expected to face a 30 percent shortage of engineers by the late 1990s, especially for information and computer science. See Simon (1994), 216.

<sup>81</sup> This is the same share achieved in 1994. See Central News Agency, May 21, 1996, 375-76; *Taiwan Economic Daily News*, July 16, 1996, 585; and Simon (1994), 209. This share excludes defense R&D, which would have added 0.8 percent to R&D's 1987 GNP share of 1.2 percent. See Suttmeier (1993), 198.

<sup>82</sup> The percentage share of R&D in GNP for 1987 was 1.2 in Taiwan, 2.9 in Japan, 2.7 in the U.S., and 2.8 in West Germany. The share in 1988 was 1.9 in South Korea, 1.5 in the PRC, and 0.9 in Singapore. See Suttmeier (1993), 201.



Japan, 2.6 in the U.S., and 2.3 in South Korea.<sup>83</sup> The government's share of R&D spending, which was 46 percent in 1990, has risen closer to 50 percent in 1995, in part reflecting support for technology-based industries such as microelectronics. In contrast, the private sector accounts for the majority of R&D in the U.S. and Europe, and at least 80 percent in Japan and South Korea.

As a percentage of sales, Taiwan's firms spend an average of only one percent on R&D, much lower than in the U.S., Japan, and South Korea. R&D comparisons in absolute terms are even more stark: the 10 largest manufacturers each spend an average of \$1.9 billion per year on R&D in Japan but only \$19 million in Taiwan.<sup>84</sup> Among industrial sectors, only chemicals and electronics and electrical machinery spend more than 2 percent of sectoral GNP on R&D. In order to encourage private spending on R&D, the government offers incentives including accelerated depreciation, investment tax credits, deferred income taxes, and duty-free imports for selected capital goods.<sup>85</sup>

### **c. Foreign Technology**

Over the years, Taiwan has relied heavily on technologies developed in other countries. In high-technology industries, its technology is said to be considerably behind that of South Korea and especially Japan.<sup>86</sup> Taiwan relies on Japan for both technology and high-technology inputs. Since 1962, Taiwan has made 2,483 technical cooperation agreements with Japan, 1,015 with the U.S., and 562 with Europe.<sup>87</sup>

Technology transfers have particularly been associated with inward FDI, which the ROC has encouraged for high-technology industries. Taiwanese companies have been quite successful at partnering with foreign multinational companies willing to share technologies in exchange for Taiwan's engineering and manufacturing capabilities. Taiwanese companies have often acted as original equipment manufacturers (OEMs), manufacturing products based on the specifications of the foreign multinational company that markets

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<sup>83</sup> See *Taiwan Economic Daily News*, July 16, 1996, 585.

<sup>84</sup> See Central News Agency, April 20, 1996, 202, and May 10, 1996, 162. Among other reasons, this discrepancy highlights the major role played in Taiwan's economy by relatively small companies.

<sup>85</sup> See Simon (1994), 208-9. Since 1986, the government has also mandated that companies with local majority ownership allocate specified shares of revenue to R&D, e.g., 0.375 percent for the electronics industry and 0.125 percent for the food industry.

<sup>86</sup> See Chen and Ho (1994), 34, and Chen Dezhao (1994), 91.

<sup>87</sup> See *Taiwan Economic Daily News*, June 14, 1996, 428. The dominant number of agreements with Japan is somewhat misleading since the Japanese are often accused of refusing to share their advanced technologies. See Suttmeier (1993), 201-2.

those products. This approach has fostered freer sharing of technology than head-to-head competition might have.<sup>88</sup> Taiwan has also been able to reduce its degree of reliance on foreign suppliers for critical technologies, for example, in microelectronics.<sup>89</sup>

While most efforts to acquire technology have focused on Japan, the United States, and Europe, some Taiwanese have also looked toward the mainland. R&D complementarities between Taiwan and the mainland may provide opportunities for further collaboration in the future. The mainland, on one hand, outspends Taiwan on R&D in both absolute and relative terms, but it is weak in applying its science and technology. Taiwan, on the other hand, has a relatively strong implementation capability.<sup>90</sup> The chances for collaboration have been strengthened by a ROC decision to permit the import of mainland technology.<sup>91</sup>

#### **d. Government R&D Programs**

The ROC government supports R&D directly, with its own research institutions and with major labs at the large state-owned companies. For example, the Industrial Technology Research Institute (ITRI) has 5,800 employees and a number of specialized research centers. It is a private organization, with 62 percent of its projects funded by the government and the balance by the private sector.<sup>92</sup> In 1994, ITRI's revenue reached \$420 million. ITRI works closely with and transfers results to the private sector. One ITRI center provides technical support to integrated circuit and wafer companies and has a joint design center in the Hsinchu Science-based Industrial Park.

The ROC's National Science Council had a budget for fiscal year (FY) 1995 of \$506 million. This includes substantial support for R&D in basic and vanguard research, overall scientific development, and such specific areas as synchronous radiation technology, high-speed computers, and aerospace technology.

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<sup>88</sup> See Simon (1994), 208.

<sup>89</sup> See Simon (1994), 196. The balance of royalty payments, however, is still negative, with Taiwan paying \$861 million in royalties to foreigners in 1993 and receiving only \$332 million. See Chi Schive (1995), 89.

<sup>90</sup> See Suttmeier (1993), 203, and Xu (1994), 151-53. The PRC recently suggested cooperation with Taiwan in science and technology, especially for agriculture and the information industry. See Central News Agency, April 30, 1996, 329.

<sup>91</sup> See Simon (1994), 205.

<sup>92</sup> See *Yearbook of the Republic of China* (1996).

### e. Hsinchu

One of the ROC's more successful efforts to promote high-technology industries has been the establishment of the Hsinchu Science-base Industrial Park.<sup>93</sup> Hsinchu was started in 1980 to attract and provide infrastructure and support for high-technology investment, both domestic and foreign. Companies are invited into Hsinchu based on their technological capabilities and especially on their ability to improve upon products already developed in industrial countries. This requirement is reflected in the relatively high (for Taiwan) 5.94 percent share of R&D expenditures in the total expenditures of Hsinchu firms.<sup>94</sup>

Hsinchu offers modern infrastructure and is located near two major universities as well as ITRI. It has attracted a range of high-technology manufacturers, including the industries that support them. Current products include integrated circuits (ICs), large cathode ray tubes (CRTs), thin-film transistor liquid crystal displays (LCDs), hand-held scanners, and high-speed modems. The park has played a substantial role in jump-starting Taiwan's push into high-technology industries.

Management of the park is under the National Science Council, which budgeted some \$38.5 million for that purpose in FY95. The government also offers a variety of incentives to attract firms to Hsinchu, including preferential tax rates, tax holidays, accelerated depreciation, readily available loans, subsidies for R&D, and export tariff bonding.

In 1995, aggregate production by the 180 companies at Hsinchu was \$10.9 billion.<sup>95</sup> Employment totaled 42,300, including 22,500 working at 56 IC companies, 11,100 at 41 computer-related companies, and 4,100 at 30 telecommunications equipment producers.<sup>96</sup> Output per worker at Hsinchu is \$257,000 versus only \$94,000 for the average manufacturing worker in Taiwan. While Hsinchu production is heavily export-oriented, imports of machinery, equipment, ICs, wafers, and other components totaled \$2.8 billion in the first half of 1995, nearly offsetting the \$3 billion in exports of computer chips, notebook computers, and other high-technology products.<sup>97</sup>

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<sup>93</sup> See *Yearbook of the Republic of China* (1996).

<sup>94</sup> See Simon (1994), 211.

<sup>95</sup> See *Taiwan Economic Daily News*, November 24, 1995, 51.

<sup>96</sup> See Central News Agency, February 26, 1996, 247. In 1994, the number of firms totaled 165.

<sup>97</sup> See *Free China Journal (Economy)*, November 24, 1995, 51.

The ROC plans to build a series of science-based industrial parks. The second one will be located on 600 hectares in Tainan County. Starting in July 1996, the Tainan park will focus on agriculture, biotechnology, microelectronics, and precision machinery.

### **3. Semiconductor Industry**

Taiwan's future depends importantly on building on the strengths of its existing high-technology industries. This section looks briefly at the development of the semiconductor industry. Taiwan is a major user of semiconductors, a key input for its production of computers, telecommunications equipment, and other high-technology products. The island has been heavily dependent on imports to meet its needs, but is embarked on a major capacity expansion effort that will reduce the import share substantially. Taiwan's semiconductor industry nevertheless remains highly dependent on foreign manufacturing technology.

#### **a. Industry Size**

Taiwan's semiconductor output in 1994 was \$3.1 billion, the fourth largest in the world and up a strong 64 percent from 1993.<sup>98</sup> In 1995, output was \$4.44 billion or around 3 percent of the \$150 billion global semiconductor market. By the year 2004, output is projected to increase to \$31.1 billion. In quantity terms, Taiwan produced some 19,000 IC wafers per month in 1995, compared with 98,000 in Japan and 95,000 in South Korea. In 1994, Taiwan produced only 7 percent of its dynamic random access memory (DRAM) requirements, importing the balance from South Korea, Japan, and other sources.<sup>99</sup>

However, a huge expansion in semiconductor capacity is underway in Taiwan.<sup>100</sup> By February 1996, various companies had announced plans to build as many as 20 new IC wafer fabrication plants in Taiwan by the year 2000. By June 1996, price reductions in the industry had caused a few firms to postpone or withdraw their proposals, but 16 plants costing some \$11 billion were still expected and ten were already under construction at Hsinchu. Taiwan's self-supply rate for DRAMs was expected to rise to 55 percent by 1998.

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<sup>98</sup> See Central News Agency, February 6, 1996, 37; May 8, 1996, 112; and June 15, 1996, 230.

<sup>99</sup> In 1991, semiconductor imports surpassed crude oil in value. See Simon (1994), 212.

<sup>100</sup> See Central News Agency, February 26, 1996, 247; May 8, 1996, 112; and June 3, 1996, 22.

### **b. Foreign Partners**

Taiwan's semiconductor industry is dominated by joint ventures between local firms and firms from Japan or the United States. Production technology is typically licensed from foreign firms, usually the foreign partner in the case of joint ventures. For example:

- Winbond Electronics Corporation licenses 16-megabit DRAM technology from Toshiba (of Japan), and has just licensed Toshiba's 64-megabit technology, with production slated to begin in 1997 at Winbond's fourth Hsinchu plant.<sup>101</sup> Winbond expects to license Toshiba's 256-megabit technology in the future. The new agreement will be Taiwan's first use of 64-megabit technology.
- Taiwan Semiconductor Manufacturing Company (TSMC), Taiwan's largest semiconductor producer, has reached an agreement to license from Fujitsu (of Japan) .35-micron technology, which can be used for 16- and 64-megabit DRAM production.<sup>102</sup> TSMC has committed a portion of capacity at a new plant to producing DRAMs for Fujitsu on an OEM basis.
- Texas Instruments-Acer, a joint venture owned 56 percent by Taiwan's Acer and 26 percent by Texas Instruments (TI), is Taiwan's largest DRAM manufacturer. TI is supplying technical assistance for the new Hsinchu plant scheduled to begin production of 16-megabit DRAMs using .4-micron technology in April 1997.<sup>103</sup>

In addition to technology, foreign joint-venture partners often provide guaranteed markets. For example, Mitsubishi Electric, a 15 percent partner in Powerchip Semiconductor Corporation, has agreed to purchase about 30 percent of the output when production of 16-megabit DRAMs begins this year.<sup>104</sup> Further, TI reportedly is committed to purchasing all of TI-Acer's output.

Increasingly, foreign partnerships involve Taiwanese investment in other countries. TSMC, for example, has formed a \$1.2 billion joint venture to build an 8-inch wafer plant

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<sup>101</sup> See Central News Agency, April 9, 1996, 68, and August 15, 1996, 244.

<sup>102</sup> See *Taiwan Economic Daily News*, 435-36; Central News Agency, June 15, 1996, 230; and Simon (1994), 212. This will be TSMC's first DRAM production, although it already produces other memory and logic chips for Fujitsu among others. TI-Acer, Mosel-Vitalic, and Vanguard International are the only companies already producing DRAMs in Taiwan. TSMC itself is 27 percent owned by Philips of the Netherlands.

<sup>103</sup> See Central News Agency, February 6, 1996, 19-20.

<sup>104</sup> See *Taiwan Economic Daily News*, June 26, 1996, 492.

in Camas, Washington.<sup>105</sup> It will hold a 57.3 percent share while Analog Devices and Altora Corporation will each hold 18 percent and Integrated Silicon Solution will hold 4 percent. As mentioned in Chapter 2 above, another Taiwan-U.S. 8-inch wafer plant is planned for Silicon Valley in California.

### **c. Government Support**

The ROC government has made a major contribution to the development of the semiconductor industry in Taiwan. The companies have received technological help, concessionary loans, and equity investments, in addition to high-technology investment incentives and the infrastructure at Hsinchu Science-based Industrial Park.

ITRI's Electronic Research and Service Organization (ERSO), under a 1970s government contract, acquired microelectronics technology from RCA of the U.S. and transferred it to local producers, including a new Hsinchu company named United Microelectronics Corporation (UMC), which is now Taiwan's second largest semiconductor producer.<sup>106</sup> Some 25 percent of UMC's equity was contributed by the government-owned Bank of Communications. ERSO became Taiwan's premier IC research center, helped found TSMC, and continues to provide technical support for Taiwan's IC producers.

The government continues to support the transfer of foreign technology. For example, the government-owned Sub-micrometer Laboratory is preparing for the production of 12-inch wafers rather than the 8-inch wafers that are the current standard.<sup>107</sup> The lab plans to acquire production equipment in 1999, initiate production by 2001, and transfer the technology to local industry by 2004.

The government is also helping to develop new technology. For example, the National Nano Device Lab is developing manufacturing processes for making 256-megabit DRAM chips in the future.<sup>108</sup> It has already achieved a process for .25-micron designs, which are much finer than the .4-micron designs currently used in Taiwan for 16-megabit DRAMs. A .18-micron process will be needed to make 256-megabit DRAMs. The lab will transfer the process to industry after it is developed and when the market warrants it.

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<sup>105</sup> See Central News Agency, April 24, 1996, 246, and June 26, 1996, 398. TSMC already has two 6-inch plants and, by the end of 1996, will have two 8-inch plants in Taiwan.

<sup>106</sup> See Simon (1994), 211-12.

<sup>107</sup> See Central News Agency, February 6, 1996, 37.

Besides technology, the government has been instrumental in providing funding for the industry. For example, the Council on Economic Planning and Development (CEPD) recently authorized \$400 million in concessional loans to semiconductor producers.<sup>109</sup> Winbond will borrow around \$218 million to help finance a new Hsinchu IC plant. The balance will be loaned to a joint venture between Taiwan's United Semiconductor Manufacturing Corporation and two U.S. design houses, S3 and Alliance, to help finance a new IC plant. The government has also helped provide equity financing. For example, as mentioned above, the government-owned Bank of Communications contributed 25 percent of the equity for UMC. Further, a 16-percent equity partner in the TI-Acer joint venture is the China Development Corporation, which is affiliated with the ruling Kuomintang Party.

#### **d. Summary**

It is apparent that Taiwan's semiconductor industry is dependent on foreign technology for its more sophisticated products. It is also clear that the ROC government is deeply involved in supporting the industry, both technically and financially. The current massive expansion of Taiwan's DRAM capacity is a financial gamble, given the instability of DRAM prices over the years. However, it may be an appropriate gamble for a capital-rich economy, particularly because it will lend stability to the supply of chips to Taiwan's large and growing computer industry.

In a separation scenario, the security of a substantial self-supply capability in semiconductors should help insulate Taiwan from the repercussions of any PRC-led economic boycott. However, the industry's reliance on foreign technology linked to inward FDI and on captive customers could make the industry vulnerable after separation. That is, if the general investment environment in Taiwan becomes uncertain and risky, foreign multinationals are likely to turn elsewhere for assured sources of supply. That would make it more difficult for Taiwan to acquire leading-edge technology and steady long-term customers.

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<sup>108</sup> See Central News Agency, May 8, 1996, 112.

<sup>109</sup> See Central News Agency, July 12, 1996, 188-89.

## **V. TAIWAN AS A SPECIAL ADMINISTRATIVE REGION**

Chapter 1 introduced the proposition that Taiwan might be forced to choose between terminating all economic ties with the mainland and unifying with the mainland as a special administrative region (SAR) under PRC authority. This chapter explores the second alternative, unifying as a SAR.

### **A. SAR SCENARIO SUMMARY**

The PRC's mantra "one country, two systems" offers a beguiling vision to Taiwan. Ostensibly, the PRC would exercise sovereignty over Taiwan as a SAR, leaving its economic, social, and domestic political systems in place for many decades. Gone would be the threats and uncertainties of the historical struggle between the PRC and ROC. Gone would be the controls and regulations that protect against subversion and overdependence. In their place would be stability and new opportunities for exchange and integration. Peace and prosperity!

Many in Taiwan question the PRC's sincerity and its competence to fulfill its promise, especially as regards respect for human and political rights. This chapter instead addresses the economic promise. How would Taiwan fare as a SAR? What economic opportunities would be opened or foreclosed? Would a SAR economy be preferable to the status quo or to a separation scenario that ended cross-strait economic ties? In addressing these questions, special attention is paid to Hong Kong's experience in anticipation of its own transition to SAR status, scheduled for July 1, 1997.

Becoming a SAR would not entail the same short-run transition costs as the separation scenario. Indeed, reducing such costs would be a principal reason why Taiwan might accept SAR status. There would nevertheless be some short-run costs and adjustments. Many capitalists would shift assets out of Taiwan as a hedge against the PRC's breaking its political and economic promises. Many talented individuals would leave Taiwan for the same reason. A general uncertainty about the future would upset domestic consumption and investment spending plans and discourage inward FDI as well. All of these factors would tend to destabilize the economy in the short run.

In the longer run, Taiwan's economy would be restructured, integrating more closely with the mainland as previous concerns about overdependence became moot. There



would be a substantial two-way flow of FDI as Taiwan's capitalists took advantage of new opportunities on the mainland and as the PRC moved to gain control of industries in Taiwan that it considered important. To the extent that market forces determined the outcome, Taiwan's manufacturing sector would shift in the direction currently promoted by the ROC government, namely toward high-technology and capital-intensive industries. Direct transportation and other linkages with the mainland would improve Taiwan's prospects for becoming a regional operations hub as well.

In the PRC, on the other hand, market forces do not necessarily determine outcomes, particularly when outcomes are important to the government. The PRC can be expected to make the Taiwan SAR's industrial policy subservient to its own. The PRC will stymie Taiwan's ambitions in some areas, e.g., aerospace and automobiles, forcing it to play handmaiden to the mainland's own industries. The PRC's general discrimination against private companies and its protection of favored or inefficient state-owned enterprises will work against the interests of Taiwan's firms. Firms owned by the Kuomintang Party will have a particularly dubious future.

Over the long run, the SAR scenario will also have bittersweet consequences for Taiwan's foreign economic ties. On the one hand, some inward FDI will be discouraged in the face of uncertainty about the extent and duration of the SAR's autonomy. Some purchasers will shift orders to other sources they view as more reliable than the PRC.<sup>1</sup> On the other hand, Taiwan's improved mainland ties will attract some investors eager to use Taiwan as a springboard to the mainland.

The SAR scenario seems inferior to the status quo. It would impose constraints on the direction of Taiwan's development and would subject businesses to political interference from the PRC central government.<sup>2</sup> In particular, the central government can be expected to begin preparing Taiwan for its socialist future. But, more positively, many industrialists would be able to expand their businesses on the mainland once the existing ROC controls were lifted. This expansion would be good for the mainland's development though not necessarily for Taiwan's.

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<sup>1</sup> For example, the PRC seems to be subject to an endless stream of threats of economic sanctions from the U.S. for offenses ranging from tolerating the theft of intellectual property to supporting nuclear and missile programs in Pakistan.

<sup>2</sup> While the ROC government also interferes politically, it may be somewhat more restrained by the rule of law.

## B. DEFINITION AND HISTORY

The PRC first proposed the SAR concept for reunification with Taiwan in 1981. Since then, the concept has been further elaborated a number of times. It will now be tested in Hong Kong, when the PRC takes sovereignty in 1997. This section summarizes the economic provisions in the SAR concept.<sup>3</sup>

The PRC's policy of peaceful reunification was initiated on January 1, 1979, with the issuance of the Message to Compatriots in Taiwan by the Standing Committee of the National People's Congress. The message advocated cross-strait linkages for trade, transportation, and postal service as well as exchanges in academic, sports, cultural, and technological areas. The message coincided with a PRC ceasefire (stopping the ritualistic shelling of offshore islands held by the ROC) and with mutual diplomatic recognition by the PRC and the U.S.

The SAR concept was introduced on September 30, 1981, when Marshal Yi Jianying, Chairman of the National People's Congress, issued a nine-point proposal. Taiwan would be a SAR after unification, with a high degree of autonomy. It would keep its armed forces, and its domestic affairs would remain free of interference from the central government. Specific economic provisions would be as follows:

- Taiwan's existing socioeconomic system would remain unchanged. Private property and inheritance rights, including those held by foreigners, would be free from encroachment.
- Taiwan could retain its external economic and cultural ties.
- Taiwanese would be free to enter/exit the mainland as well as settle there.
- The central government would subsidize the finances of Taiwan's government when necessary.
- Even before unification, Taiwan's industrialists and businesses would be welcome to invest and engage in various economic undertakings on the mainland, and their legal rights, interests, and profits would be guaranteed.

In December 1982, a new constitution granted the state the authority to establish SARs when necessary. Article 31 gave the National People's Congress the authority to prescribe the systems to be instituted in SARs.<sup>4</sup>

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<sup>3</sup> This subject is discussed in Gu (1995), 73-77; Chang (1993), 4-6; and Wu (1994), 21-22.

<sup>4</sup> See Wu (1994), 22.

The SAR proposal was further elaborated in six points discussed in an interview with Deng Xiaoping by Winston L.Y. Wang, a U.S. scholar from Seton Hall College, on June 26, 1983. The six points amplified mainly the political and administrative aspects of the SAR concept. Taiwan would be an independent jurisdiction within the PRC, with independent legislative powers and the legal right of final judgment. The PRC would not station administrative personnel or troops in Taiwan. Taiwan would continue to administer its own party, government, and armed forces. Taiwan would be allowed to purchase weapons abroad as well as issue passports and visas (for foreigners). Diplomatically, however, only the PRC would represent China.

During 1984, comments by Deng Xiaoping and Premier Zhao Ziyang further amplified the concept and began referring to it in public as one country, two systems. In negotiations with the British over the return of Hong Kong, begun in 1982, the PRC decided to apply the SAR concept to that territory, to test and demonstrate an approach that would be applied to Taiwan in the future. However, a more generous SAR definition would be used for Taiwan, e.g., allowing it to retain military forces (under the unified command of the People's Liberation Army (PLA)) and not have mainland forces stationed in Taiwan.

The outlines of Hong Kong's SAR were described in the Joint Sino-British Declaration issued on September 26, 1984. Hong Kong would become a SAR under Article 31 and exercise a high degree of autonomy. Hong Kong would be administered by Hong Kong people, maintaining its own executive, legislative, and independent judicial power, including that of final adjudication. Hong Kong would retain its existing social and economic systems. Capitalism would remain for 50 years.<sup>5</sup> Hong Kong would remain an international financial center, and the PRC would levy no taxes on the new SAR. Hong Kong would maintain economic and cultural ties with other nations and international organizations and issue travel documents for entry and exit. Hong Kong would remain a separate customs territory with its own currency. Migration from the mainland to Hong Kong would be strictly controlled. The PRC would handle Hong Kong's diplomatic and military affairs.

The PRC's SAR proposal has not changed much since the mid-1980s. Recent pronouncements have focused more on how to bring it into being for Taiwan. For

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<sup>5</sup> The PRC's rationale, as interpreted by one observer, was that in 50 years the PRC would join the ranks of developed economies. Then, with living standards about the same on the mainland, Hong Kong, and Taiwan, there would be no excuse for Taiwan and Hong Kong retaining capitalist systems. See Wu (1994), 30-32.

example, in an interview on September 24, 1990, the PRC's President Yang Shangkun suggested negotiations on cross-strait economic exchanges to reduce hostility before turning to political negotiations. He also reiterated that Taiwan would be granted a higher degree of autonomy than the PRC's existing autonomous regions. Similarly, on January 30, 1995, the PRC's President Jiang Zemin published eight points that addressed how to get the unification process started. One observer inferred from the eight points that the one-country, two-systems approach might not be the only acceptable method.<sup>6</sup> Jiang also emphasized that Taiwan's business interests on the mainland would be protected even in the event of hostilities.

The PRC does not seem to have a definitive timetable for assuming sovereignty over Taiwan and establishing it as a SAR. Mao Tse-tung reportedly told President Richard Nixon that the PRC was prepared to wait for 100 years.<sup>7</sup> More recently, the PRC has sometimes stated that if separation continues for too long force might be used against Taiwan.<sup>8</sup>

The sincerity of the PRC's offer is difficult to judge, especially given the bitter, decades-long struggle between the Chinese Communist Party (CCP) and the Kuomintang. Some have noted apparent contradictions between the proposed SAR provisions and the PRC's current actions against Taiwan.<sup>9</sup> For example, the SAR would be allowed to maintain economic and cultural relations with other countries, yet the PRC protests the unofficial trade and representative offices the ROC opens in other countries today. Similarly, the proposed SAR would be allowed to maintain armed forces and even purchase foreign weapons, yet the PRC protests the sale of weapons to the ROC today. The difference, of course, is that the ROC's international relations today challenge PRC sovereignty but that would not be an issue for a future SAR clearly subject to PRC authority. A more meaningful test will be the PRC's treatment of Hong Kong as it transitions to SAR status.

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<sup>6</sup> See Gu (1995), 77. Subsequent pronouncements have not substantiated this interpretation.

<sup>7</sup> See Central News Agency, April 27, 1996, 277. Wei (1993), 230, and Weng (1993), 367, also observe that the PRC does not currently announce a specific timetable for unification.

<sup>8</sup> See Yahuda (1995), 51.

<sup>9</sup> See Wu (1994), 78.

## C. EXPERIENCE OF HONG KONG

### 1. Rule of Law

Hong Kong's fate was announced in 1984 by the Joint Sino-British Declaration. Since that time, preparations have moved forward for the SAR that will come into being when the PRC assumes sovereignty on July 1, 1997. A constitutional document called the Basic Law of the Hong Kong Special Administrative Region was enacted by the National People's Congress in April 1990. Currently a PRC-appointed Preparatory Committee is working through the many details that must be settled for the transition. Critics have closely watched the PRC's actions during this period, spotlighting cases where its decisions seem to violate the letter or spirit of prior agreements. For the most part, the alleged violations concern such political issues as democratic elections, freedom of the press, and right of final adjudication. While those issues are important, this section will concentrate on other issues more directly relevant to the future SAR's economy.

Perhaps the major issue raised that affects the economy is the prospect for the continued rule of law and the sanctity of contracts. The rule of law, long a strong point for Hong Kong, is essential to the Western way of doing business.<sup>10</sup> In the PRC and other countries of East Asia where governments and political parties are heavily involved in the economy, contracts seem to be overridden routinely by the authorities. Doing business often depends on influential connections or judicious bribery. Hong Kong's role as a major financial center and a meeting place between Western capital and Eastern opportunity could be jeopardized if the rule of law there is disrupted.

It thus settled few stomachs when the PRC said that it might make changes to Hong Kong's final court of appeals after 1997. Supposedly the integrity and independence of the court system had been settled in a 1991 Sino-British agreement, and then again in a June 1995 Sino-British agreement.<sup>11</sup> Uncertainty about the future Hong Kong legal system is causing many companies to explore the use of offshore arbitration after 1997, for example in Britain or Singapore.

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<sup>10</sup> Ethnic Chinese seem to be more adept at doing business in a PRC whose rule of law is imperfect at best.

<sup>11</sup> See *China and North Asia Monitor*, February, 1995, 8, and *Far Eastern Economic Review*, April 25, 1996, 55.

## 2. PRC Interference

The PRC has already acquired de facto authority to approve long-term contracts in Hong Kong, since after 1997 the PRC will be in a position to invalidate any contract of which it disapproves. Thus, any major project that requires long-term financing or granting of a license or privilege by the Hong Kong government is subject to PRC veto. The PRC has used this veto on a number of occasions to extract political or economic concessions. This behavior brings into question the credibility of promises that the Hong Kong SAR will administer its own affairs without interference.

One example is the delay caused by the PRC in the approval of financing for Hong Kong's new airport. In late 1989, the Hong Kong government announced plans for the airport and port facilities costing some \$18.1 billion, with the government responsible for raising 45 percent of the cost.<sup>12</sup> The PRC, claiming that the projects would deplete Hong Kong's fiscal reserves prior to the handover, preferred a more economical airport and held up the proposal. The PRC was also concerned about the membership of the new Airport Authority, which would control the allocation of lucrative procurement contracts and landing slots. The PRC would not agree to the new airport until July 4, 1991, when Britain agreed that the airport would be completed before the handover, the new SAR government would start with fiscal reserves of at least \$3.2 billion, and the PRC could have a say in appointments to the Airport Authority, including sending its own representative from the Bank of China Group.<sup>13</sup>

In a related incident, the Hong Kong government awarded the contract for the Western Harbor Crossing, a key project for the new airport, to a sole-source consortium, 48 percent owned by mainland-controlled companies CITIC Hong Kong, CITIC Pacific, and China Merchants Holdings. Hong Kong's legislative council viewed the contracted rate of return of 15 to 18 percent as excessive but, after warnings from the PRC's Hong Kong and Macau Affairs Office, reduced it only slightly and approved the contract.<sup>14</sup>

An even more glaring example of PRC muscle is the restructuring of Hong Kong's airline industry. Hong Kong initially had two foreign-controlled carriers, Cathay Pacific and Dragonair. The mainland was not about to be locked out of this lucrative market. Its initial foray was to start a new airline. The mainland's state-owned China National Aviation

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<sup>12</sup> See Sung (1993), 339-40.

<sup>13</sup> In March 1992, the Hong Kong government's fiscal reserves amounted to \$91.8 billion, plus land that would be worth more than \$40 billion under the new SAR. See Sung (1993), 340.

<sup>14</sup> See Hook (1995), 210.

Corporation (CNAC), a subsidiary of the national airline regulator, applied in April 1995 for a license to establish China Hong Kong Airlines, to be based in Hong Kong. The new carrier posed a competitive threat to Cathay, whose principal owner is Britain's Swire Pacific, and to Dragonair, a Cathay subsidiary.<sup>15</sup>

The expiration in April 1995 of the aviation agreement covering flights between Hong Kong and Taiwan gave the PRC a strong opportunity to use its political leverage to become a player in the Hong Kong market. An eventual agreement would have to be approved by the Sino-British Liaison Group, and thus the PRC could hold the negotiations hostage to its own purposes. By December 1995, the negotiators reached a draft 5-year agreement, significantly increasing the number of flights and allocating them among Hong Kong's Cathay and Dragonair and Taiwan's China Airlines and EVA Airways. Implementation of the agreement, however, was held up for months because the PRC refused to accept it on the agenda of the Sino-British Liaison Group.

The logjam was finally broken in May 1996 when Swire and mainland interests reached agreement on the ownership structure of Hong Kong's airline industry. CNAC agreed to buy a 35.9 percent stake in Dragonair, which would then subsume China Hong Kong Airlines. CNAC paid \$256.8 million for shares held by Swire, by mainland-owned CITIC Pacific, and Dragonair founder K.P. Chao, reportedly receiving a 20 percent discount on the price of the shares. Altogether, the mainland now holds a 64.4 percent majority interest in Dragonair, with CITIC Pacific still holding 28.5 percent and Swire only 25.5 percent. To pay for the transaction, CNAC reduced its 4.1 percent share of Cathay to 1.5 percent but is likely to retain its seat on Cathay's board. At the same time, Swire agreed to sell more shares in Cathay to CITIC Pacific at a reported 15 percent discount, raising CITIC's stake from 10 percent to 25 percent of Cathay and dropping Swire's share from 52.6 percent to 43.9 percent.

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<sup>15</sup> See the *Asian Wall Street Journal*, June 24, 1996, 2, and *Free China Journal (Politics)*, May 3, 1996, 313.

The Sino-British panel finally approved the accord on June 7, 1996, and the airlines formally signed it on June 13, 1996.<sup>16</sup> Some Hong Kong analysts had doubted that the PRC would tolerate a foreign-owned carrier in Hong Kong after 1997. In that sense, Swire pulled off a good deal, allowing it to retain controlling interest in Cathay and incidentally providing funds to help pay for its impending move to Hong Kong's new airport. However, other multinationals in Hong Kong are reportedly worried about what the aggressive actions by mainland-owned companies portends for their own futures.<sup>17</sup>

The airport construction and airliner ownership examples illustrate the PRC's readiness to interfere with Hong Kong's economy and the decisions of the Hong Kong government when it thinks it is necessary. While it is understandable that the PRC would be concerned about the avaricious British draining Hong Kong's coffers for the airport and monopolizing the airline industry, the PRC's method of resolving these issues flies in the face of its promises of autonomy to the Hong Kong SAR and security for foreign investors. As one author puts it, the PRC has demonstrated that "on issues small and large, Hong Kong could always expect Chinese input and participation and could often expect dissent or even veto, irrespective of the Basic Law."<sup>18</sup> Moreover, in addition to national concerns, the PRC investors in these examples seem also to have financial motivations. This portends a flood of aggressive mainland investors muscling their way into Hong Kong after 1997. Thus, Hong Kong's Governor Chris Patten has said that he does not believe the PRC intends willingly to dishonor its autonomy commitments, but fears lower-level mainland bureaucrats will interfere from time to time out of ignorance or corrupt intent.<sup>19</sup>

### 3. Integration with the Mainland

Hong Kong and the mainland have already integrated their economies to a substantial degree. Since the PRC began to open its economy to develop ties with capitalist

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<sup>16</sup> See Central News Agency, June 8, 1996, 132-33; and June 13, 1996, 201; and *Free China Journal (Politics)*, June 22, 1996, 377. Besides the desire of the PRC's airline industry to participate in the lucrative Hong Kong-Taiwan route, political considerations had hindered an agreement. The PRC had objected to Taiwan's China Airlines continuing to fly to Hong Kong with the ROC flag painted on its tail, a problem that was solved in October 1995 when China Airlines changed its logo to a plum blossom. For its part, the ROC had to make a special exception to its usual practice of banning businesses in which mainland interests held more than 20 percent. The ROC had previously made such an exception for Air Macau, which is 51 percent mainland owned.

<sup>17</sup> See *Far Eastern Economic Review*, May 9, 1996, 67.

<sup>18</sup> See Robinson and Lin (1993), 452.

<sup>19</sup> See Central News Agency, May 9, 1996, 136.



economies in the 1980s, there has been a substantial two-way flow of capital between Hong Kong and the mainland. As a result, Hong Kong has substantially restructured its economy. A future Taiwan SAR might restructure itself in some of the same ways.

#### **a. Hollowing Out**

As noted in Chapter 2, Hong Kong has been the dominant source of FDI for the mainland. From 1992 to 1994, for example, Hong Kong accounted for 63.8 percent of the mainland's total FDI inflow. The outflow of FDI from Hong Kong has had a dramatic impact on Hong Kong's manufacturing sector, causing it substantially to hollow out. For example, by 1992 Hong Kong had only 600,000 manufacturing workers, down from over 1 million in the peak years of the 1980s.<sup>20</sup> Further, from 1980 to 1990, the share of manufacturing in Hong Kong's GDP dropped from 24 percent to 17 percent.<sup>21</sup> Hong Kong investors began building overseas factories in Southeast Asia in the 1970s and on the mainland in the 1980s, particularly to reduce labor costs. By 1991, Hong Kong-owned factories employed some 3 million workers in Guangdong Province on the mainland.<sup>22</sup>

While Hong Kong companies also invested in real estate and services, much of their effort was focused on labor-intensive processing factories. Products were designed in Hong Kong but production materials were shipped to Hong Kong-owned factories on the mainland for processing. The processed materials were then returned to Hong Kong for finishing, testing, packaging, warehousing, distribution, and marketing. In 1991, 55.5 percent of Hong Kong's exports to the mainland were materials to be processed and returned. The returned processed materials constituted 67.4 percent of Hong Kong's imports from China.<sup>23</sup>

Hong Kong had difficulty moving into high-technology manufacturing to replace the labor-intensive factories it lost. In part, this reflects the ease with which Hong Kong's industrialists were able to solve their labor problems by moving to the mainland. They were not forced to turn to high technology in order to remain competitive. Moreover, the Hong Kong government, unlike most others in the region, did not institute an industrial policy to promote and protect high-technology industries. Thus, in 1989, Hong Kong's manufacturing sector was more labor-intensive than its service sector and manufacturing

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<sup>20</sup> See Chen and Ho (1994), 36.

<sup>21</sup> See Jones et al. (1993), 129.

<sup>22</sup> See Ash and Kueh (1995), 85.

<sup>23</sup> See Yeh (1994), 139.

workers were much less productive than service workers. For example, value-added per worker in 1989 was \$14,000 for manufacturing, \$19,000 for distribution, hotels, and restaurants, \$49,000 for finance, real estate, and business services, and \$27,000 for transport, storage, and communications.<sup>24</sup>

#### **b. Growth of Service Sector**

Instead of shifting from labor-intensive to high-technology industries, Hong Kong's economy shifted toward its service sector. As indicated on Table V-1, industry (which includes more than manufacturing) dropped from 31.8 percent of GDP in 1980 to only 24.9 percent by 1991. Over the same period, the service sector's share increased by 7.6 percentage points. The service sector also grew in Taiwan during this period, but its share increased mainly at the expense of the agricultural sector. The industrial share dropped only 3.4 percentage points, in part because Taiwan was able to replace the jobs lost through outward FDI with new jobs in capital-intensive and high-technology factories.

**Table V-1. Share of GDP by Sector for Hong Kong and Taiwan  
(Percent)**

Sector	1980	1985	1991
Hong Kong			
Agriculture	1.0	0.7	0.3
Industry	31.8	29.6	24.9
Services	67.2	69.7	74.8
Taiwan			
Agriculture	7.7	5.8	3.7
Industry	45.7	46.3	42.3
Services	46.6	47.9	54.0

Source: Ash and Kueh (1995), 87.

Hong Kong's shift into services reflects its realization of the ROC's own goal of becoming a regional hub. Hong Kong has become a major financial center. In 1989, Hong Kong banks accounted for 17.1 percent of the PRC's total commercial loans and acted as originators for 25.1 percent of its syndicated loans.<sup>25</sup> Hong Kong has also resumed its earlier role as a major entrepôt for trade with the mainland. In 1993, 54 percent of the

<sup>24</sup> See Chen and Ho (1994), 31.

<sup>25</sup> See Chen and Ho (1994), 55.

mainland's total exports were reexported through Hong Kong. At the same time, 34 percent of the mainland's imports were reexported through Hong Kong.<sup>26</sup>

### **c. FDI from the Mainland**

While Hong Kong has long been the largest source of FDI for the mainland, the PRC in 1993 became the largest source of FDI for Hong Kong. By that year, the mainland apparently had the largest cumulative FDI in Hong Kong, edging out Japan and the United States. Both government agencies and enterprises from the PRC invested in Hong Kong, with the total rising from \$6 billion in 1984 to \$10 billion by 1989 and \$20 billion in 1992. Mainland FDI is highly diversified, including banking, insurance, trade, shipping, aviation, real estate, and manufacturing. Mainland investment has helped stabilize Hong Kong and strengthened its role as a gateway to the mainland.<sup>27</sup> The mainland's manufacturing investments have particularly focused on Hong Kong's high-technology industries. Investments are made for profit as well as to acquire technology and training.<sup>28</sup>

The Bank of China Group, which includes nine banks from the mainland, four from Hong Kong, and one from Macau, already plays a major role in Hong Kong, e.g., helping to resolve banking crises, providing credits to stabilize the futures markets, and issuing bank notes for the government.<sup>29</sup> It is the second largest banking group in Hong Kong. The mainland publishes several newspapers in Hong Kong. China Resources operates department stores. CITIC owns 30 percent of Hong Kong Telephone.<sup>30</sup> Altogether, an estimated 1,100 mainland companies are doing business in Hong Kong.<sup>31</sup> For good or bad, the inflow of mainland capital to Hong Kong has helped boost real estate prices there to record heights, higher even than those in Tokyo.<sup>32</sup>

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<sup>26</sup> See Sung (1995), 24–25.

<sup>27</sup> See Sung (1995), 21.

<sup>28</sup> See Chen and Ho (1994), 48–52. Some say that mainland FDI is attracted to Hong Kong because the rule of law creates a stable environment for investment there. See Sung (1995), 21.

<sup>29</sup> See Chen and Ho (1994), 57.

<sup>30</sup> The PRC is reportedly pressuring Hong Kong Telephone's British majority owner, Cable and Wireless, to become a minority owner instead. See *New York Times*, July 1, 1996, A1.

<sup>31</sup> See Rafferty (1991), 58–59; Gu (1995), 98; and *New York Times*, July 1, 1996, A1.

<sup>32</sup> See Sung (1995), 21.

#### **d. Emigration**

The prospect of integration with the mainland has caused many people to emigrate from Hong Kong. In addition, many more have taken the precaution of obtaining foreign passports or visas so that they can emigrate if it should prove necessary.<sup>33</sup> Some 42,000 emigrated in 1989 and 62,000 more left in 1990. Some estimate that 500,000 could leave before 1997. Moreover, a high proportion, perhaps 25 to 33 percent, of those leaving are skilled professionals, including computer programmers, accountants, judges, medical doctors, and engineers.<sup>34</sup>

To some extent, Hong Kong can draw on mainland sources for skilled manpower. Perhaps 60,000 from the mainland already work in Hong Kong for mainland-owned companies, including many engineers. The Hong Kong government has relaxed barriers for professional workers from the mainland, making it possible for them to become permanent residents. Hong Kong is also experimenting with a scheme to import 1,000 mainland graduates.<sup>35</sup>

### **D. INTEGRATION OF THE TAIWAN SAR AND THE MAINLAND**

Under the Taiwan SAR scenario, Taiwan becomes a permanent part of the PRC but remains autonomous in many respects. Taiwan and the mainland will certainly be more closely integrated than they are today. However, an important purpose of SAR status is to prevent total integration, for decades at least.<sup>36</sup> Continuing differences in socioeconomic systems and levels of development will cause each side to protect against destructive influences from the other side. While the struggle between the PRC and the ROC will be over, the competition between communism and capitalism will continue. This section explores how partial integration is likely to affect Taiwan's economic interests.

#### **1. Relaxation of Controls**

Reunification will permit the elimination of some of the controls that have hindered cross-strait economic relations. The prime candidates for elimination are the ROC's

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<sup>33</sup> An estimated 600,000 Hong Kongers currently hold foreign passports. See *New York Times*, July 1, 1996, A1.

<sup>34</sup> See Sung (1993), 317, and Hook (1995), 206.

<sup>35</sup> See Sung (1995), 27, 35.

<sup>36</sup> It has been observed that, in institutional terms, the mainland and the Hong Kong SAR will be less integrated than Greece and Ireland. Hong Kong will remain a separate customs territory while most restrictions on internal commerce have been eliminated in the European Union. See Sung (1995), 17.

controls on the two-way flow of FDI and on imports from the mainland. These controls were designed, to a large extent, to prevent overdependence on the mainland. The political reasons for that goal will have much less relevance once Taiwan has united permanently with the PRC.<sup>37</sup> The SAR government can thus be expected to relax these controls. The PRC government, on the other hand, has encouraged cross-strait economic relations as part of its unification strategy. It thus has fewer politically motivated controls to relax.

Both sides, however, will continue to impose controls for economic purposes. They will protect emerging growth industries as well as employment-sensitive sunset industries. The Taiwan SAR, having the more advanced economy, will probably have less need for such controls. The mainland, however, with inefficient industries and severe underemployment problems, will have considerable need for protection.

Controls will also arise because of the continuing competition between socialism and capitalism. The PRC government presumably will intend that the Taiwan SAR move gradually toward socialism, strengthening socialism in the country as a whole and eventually eliminating the need for special SAR status. The Taiwan SAR, on the other hand, will presumably remain committed to capitalism, hoping to encourage a transition away from socialism on the mainland. This ideological struggle will sometimes reinforce the economic reasons for continued controls.

The most obvious example is the PRC's need to protect the markets of its inefficient state-owned enterprises (SOEs). The PRC government could not tolerate the massive unemployment that would result if uncompetitive SOEs were allowed to fail. Moreover, the PRC remains committed to the SOEs as the embodiment of socialism with Chinese characteristics. Meaningful reforms for the SOE sector will thus be implemented only gradually. In the meantime, the SOEs will continue receiving market protection, preferential credit on soft terms, and other favorable treatment.

The future of socialism on the mainland is unclear. On the one hand, the PRC has gone a long way towards adopting a market economy, with a dominant majority of prices now being determined by market forces. Only a few strategic sectors remain subject to central planning. The PRC has also allowed the growth of a variety of ownership modes. Besides the SOEs which are owned by the central government or the provinces, the PRC

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<sup>37</sup> In this scenario, the Taiwan SAR is assumed to be permanent. However, the SAR government will have a political agenda distinct from that of the central government. It will be concerned with defending its autonomy and influencing its duration. Accordingly, it might still have political reasons for pursuing economic autonomy.

has allowed the proliferation of entrepreneurial firms owned by local governments as well as collectives and private firms. On the other hand, the PRC remains constitutionally committed to socialism with Chinese characteristics. The SOEs represent the most concrete expression of socialism, and they will continue to play a major role in the economy for the foreseeable future. Perhaps international competition will eventually make preservation of the SOEs unaffordable for the PRC. In the meantime, they will remain a barrier to mainland-Taiwan economic integration.

## **2. Impact of Integration on Taiwan**

Elimination of current ROC controls on cross-strait commerce would have a major impact. As noted in Chapter 2, ROC controls have caused the average size of Taiwanese FDI projects on the mainland to be relatively small and have limited Taiwanese participation in capital- and technology-intensive projects. The mainland would welcome more Taiwanese FDI in such projects, including major infrastructure investments.

After unification, more of Taiwan's larger companies would shift their attention to the mainland. The removal of restrictions would undoubtedly be good for those companies, opening new avenues for growth. Further, as a reward for accepting SAR status, the PRC might give Taiwanese preferential access to at least some mainland markets. While competition from other foreign investors and difficult business conditions would limit their overall success, they can be expected to do very well based on language and ethnic ties, familiarity, and connections. Indeed, success on the mainland market could eventually shift the center of gravity of some of these companies to the mainland.

For the people of Taiwan, the impact of economic integration with the mainland is less clear but probably positive. Some of its leading companies will divert investments to the mainland that otherwise would have been made in Taiwan. However, Taiwan has the advantage of a well educated population, motivated workers, scientific and technical skills, competitive managers, a capitalist infrastructure, cooperative ties to the advanced economies, and a leading position in the manufacture of information products. These advantages will continue to attract investment from domestic firms and foreign multinationals. In addition, capital from the mainland will be eager to seize opportunities in Taiwan that are not available on the mainland. Hong Kong, without controls on inward FDI, has attracted substantial inflows from the mainland.

A freer two-way flow of FDI would promote a restructuring of the Taiwan SAR economy. The structure may well shift in the directions currently advocated by the ROC government, toward a greater reliance on services and, within the manufacturing sector,

toward high-technology industries. Certainly, elimination of ROC prohibitions against direct cross-strait trade and transportation will give a big boost to the regional hub plan. Moreover, relaxed regulations on FDI to the mainland and on financial interaction should greatly boost hopes for making Taiwan a regional financial center. Furthermore, Taiwan's foundation in high-technology industries and active industrial policy supporting them may reduce the extent to which its manufacturing sector is hollowed out.

### **3. Interference from the Mainland**

As discussed above, the PRC has interfered with economic decisions in Hong Kong, even before it assumes sovereignty in 1997. A Taiwan SAR will also be subject to interference from the central PRC government and elsewhere on the mainland, notwithstanding promises of non-interference.

FDI from the mainland will sometimes promote growth in industries of the future. Sometimes, however, that FDI will work against the Taiwan SAR's autonomy and productivity. For example, after the mainland's SOEs buy into Taiwan's manufacturing industry, its infrastructure, and its financial sector, the central government will have a direct channel for influencing the Taiwan SAR's development decisions. The central government will have other levers as well, stemming from its influence over the SAR's cross-strait and foreign transactions.

One avenue in which the central government is likely to interfere is to make Taiwan's industrial policy subservient to its own. The mainland will retain controls on FDI and imports from Taiwan when necessary to protect strategic industries, especially those reserved for mainland SOEs. The central government may discourage independent development of those industries in the Taiwan SAR and try to put Taiwan's capital and technology at the disposal of the mainland SOEs. For example, the mainland is currently attempting to assemble a consortium that can develop a 100-seat regional commercial airliner. Negotiations with South Korean companies eventually failed because both sides wanted to play the leading role in manufacturing the aircraft. The ROC, which has commercial aircraft ambitions of its own, expressed an interest in participating in the mainland project, but the mainland was dismissive in its response.<sup>38</sup> After unification, the central government will likely encourage Taiwan to develop only those industrial

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<sup>38</sup> Recent reports, however, suggest that two Taiwanese companies might be allowed to invest a combined \$110 million for a 5 percent share of the project. This would entitle them to design and manufacture the vertical and horizontal stabilizers. See Central News Agency, September 9, 1996, 9.

capabilities that can contribute to the mainland's strategic objectives, for example, building high-technology subsystems or components. This will frustrate the ambitions of some of Taiwan's capitalists.



## VI. CONCLUSIONS

This paper has explored the economic implications of alternative departures from the status quo in Taiwan. Not surprisingly, the status quo seems superior to either of the alternatives examined. The ROC, after all, has persisted in choosing the status quo despite the availability of the other alternatives.<sup>1</sup>

A more difficult and ultimately unanswerable question is whether Taiwan would be better off economically under a separation scenario or a SAR scenario. That is, would Taiwan be better off without economic ties to the mainland or as a SAR subject to PRC authority? In the future, a frustrated or embarrassed PRC may force the ROC to choose between these alternatives.

A separation scenario would tend to isolate Taiwan, not only from the mainland but also from many of its other economic partners. The hostility of the mainland toward Taiwan would engender uncertainty about Taiwan's long-term reliability as a partner in production or a supplier. Taiwan's inward FDI and exports would suffer as a result. Moreover, the PRC is likely to accompany the termination of cross-strait ties with an economic boycott against Taiwan. It would pressure Taiwan's economic partners not to do business with it. While such a boycott could only be partially effective, it would be damaging and further erode the confidence of investors.

A SAR scenario would enhance rather than sunder Taiwan's mainland ties. While the PRC would continue to protect its inefficient state-owned enterprises (SOEs), the elimination of ROC controls on cross-strait transportation, investment, and trade would create new business opportunities. Two-way cross-strait capital flows would help restructure Taiwan's economy, increasing productivity to the extent that market forces were allowed to guide the restructuring. Taiwan's potential role as a regional hub could be strengthened. At the same time, however, Taiwan's economy would acquire a new master. The industrial policy of the PRC's central government would dominate that of Taiwan's SAR government, blocking some of Taiwan's development objectives. Mainland enterprises would buy and push their way into Taiwan's economy, seizing lucrative opportunities, gaining control of industries considered to be strategic, and generally

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<sup>1</sup> The ROC, of course, also has non-economic reasons for preferring the status quo.

preparing Taiwan for its socialist future. The ROC's trend toward a transparent business environment based on the rule of law would be reversed and Taiwan's attractiveness for domestic and foreign investors would suffer as a result.

If Taiwan had to choose between the separation and SAR scenarios, political and ideological factors would heavily influence the outcome, perhaps leading to a choice that was inferior from a narrow economic viewpoint. If the decision were made based on economic grounds alone, the preferable choice would depend importantly on the planning horizon. In the short-to-medium run, the SAR scenario seems superior. It has lower costs for transition and initial disruption, enhances economic ties with the mainland, and avoids a destructive economic boycott orchestrated by the PRC. The separation scenario, in contrast, could easily leave the ROC with a stagnant, harassed, and increasingly isolated economy.

From a long-term perspective, however, the choice is less clear. Under the SAR scenario, Taiwan's SAR status would steadily erode and its economy would increasingly take on socialist characteristics, including SOE ownership, subordination to central government policy, local political interference, and distorted incentives. Under the separation scenario, in contrast, Taiwan would retain its largely capitalist economy and self-determined industrial policy. Eventually, the extent of the PRC-led economic boycott would stabilize and perhaps erode, allowing Taiwan to develop a stable and profitable niche in the global economy. In the end, Taiwan would have an efficient, capitalist economy rather than a distorted socialist economy with Chinese characteristics.

Moreover, the separation scenario is potentially reversible, while the SAR scenario is not. The previous period of cross-strait hostility and mutual isolation lasted 30 years, from 1949 to 1979. As before, a new separation scenario might eventually give way to a political thaw and resumed economic ties. That would bring Taiwan back to the status quo it now prefers. The SAR scenario, on the other hand, is not reversible. Once the PRC gains sovereignty over Taiwan, it will keep it. The best that Taiwan could hope for under the SAR scenario is that economic reforms would lead to a more efficient market economy and perhaps an erosion of socialism on the mainland.

This study focuses on how Taiwan might choose between the separation and SAR scenarios. It should nevertheless be noted that the PRC would put its own interests at risk by presenting such an ultimatum. Cross-strait ties, after all, are mutually beneficial. Cutting those ties would deny important employment opportunities and export earnings to the mainland. Moreover, discriminating against Taiwanese investors, perhaps to the point of expropriating their businesses, would unsettle foreign investors from other countries and

threaten future FDI inflows. An attempt by the PRC to coerce Taiwan might also induce sanctions by the U.S. and its allies against the PRC. In light of these potential costs, and the notorious ineffectiveness of economic sanctions in general, the PRC is likely to hesitate before delivering its ultimatum. It might nevertheless accept the risks if it were sufficiently provoked or Taiwan seemed patently vulnerable.

The conclusions of this paper do not suggest that the future of Taiwan will take care of itself anytime soon. From an economic perspective, there is little reason to think that the Taiwanese would accept SAR status voluntarily. They might consider it seriously if the PRC forced them to choose between SAR status and a termination of cross-strait ties, but that would amount to the coercion decried by the U.S. in the Taiwan Relations Act.

Indeed, one of the many questions left unanswered by this paper is how the U.S. would react if the ROC were faced with a termination of its cross-strait economic ties. Future studies should explore the circumstances in which the U.S. should respond and especially what the U.S. could do to impose counter-sanctions against the PRC or to break a PRC-led embargo against Taiwan.

## GLOSSARY

APEC	Asia Pacific Economic Cooperation
ARATS	Association for Relations across the Straits
ASEAN	Association of Southeast Asian Nations
BERI	Business Environment Risk Intelligence
CCP	Chinese Communist Party
CEPD	Council for Economic Planning and Development
CNAC	China National Aviation Corporation
CNOOC	China National Offshore Oil Corporation
CPC	Chinese Petroleum Corporation
DPP	Democratic Progressive Party
DPRK	Democratic People's Republic of Korea
DRAM	Dynamic Random Access Memory
EPZ	Export Processing Zone
ERSO	Electronic Research and Service Organization
FDI	Foreign Direct Investment
FPG	Formosa Plastics Group
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
IC	Integrated Circuit
ITRI	Industrial Technology Research Institute
LCD	Liquid Crystal Display
MFN	Most Favored Nation
MOEA	Ministry of Economic Affairs
MOU	Memorandum of Understanding
OEM	Original Equipment Manufacturer
PERC	Political and Economic Risk Consultancy
PLA	People's Liberation Army
ROC	Republic of China
SAR	Special Administrative Region
SEF	Straits Exchange Foundation
SEZ	Special Economic Zone
SOE	State-owned Enterprise
TI	Texas Instruments

TSMC

Taiwan Semiconductor Manufacturing Company

UMC

United Microelectronics Corporation

WTO

World Trade Organization

## BIBLIOGRAPHY

- Almanac of China's Foreign Economic Relations and Trade.* Hong Kong: China Resources Advertising Company (1993/1994, 1994/1995 1995/1996).
- Ash, Robert F., and Y. Y. Kueh. "Economic Integration within Greater China: Trade and Investment Flows between China, Hong Kong, and Taiwan." In *Greater China: The Next Superpower?*, edited by David Shambaugh. New York: Oxford University Press, 1995.
- Asian Development Bank. *Key Indicators of Developing Asian and Pacific Countries.* Hong Kong: Oxford University Press, 1994.
- Aspaturian, Vernon V. "International Reactions and Responses to PRC Uses of Force against Taiwan." In *If China Crosses the Taiwan Strait*, edited by Parris H. Chang and Martin L. Lasater. Lanham, MD: University Press of America, 1993.
- Central News Agency. *On-Line Newswire.* Uniform Resource Locator: <http://www.taipei.org/>.
- Chang, Parris H. "Beijing's Relations with Taiwan." In *If China Crosses the Taiwan Strait*, edited by Parris H. Chang and Martin L. Lasater. Lanham, MD: University Press of America, 1993.
- Chen Dezhaoh. "Chinese Public Policy and the Southern China Growth Triangle." In *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, edited by Myo Thant, Min Tang, and Hiroshi Kakazu. Hong Kong: Asian Development Bank, 1994.
- Chen Hurng-yu. "Taiwan's Economic Relations with Southeast Asia." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards, NSW: Allen and Unwin Australia, 1994.
- Chen Pochih. "Foreign Investment in the Southern China Growth Triangle." In *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, edited by Myo Thant, Min Tang, and Hiroshi Kakazu. Hong Kong: Asian Development Bank, 1994.
- Chen, Edward K. Y., and Anna Ho. "Southern China Growth Triangle: An Overview." In *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, edited by Myo Thant, Min Tang, and Hiroshi Kakazu. Hong Kong: Asian Development Bank, 1994.
- Cheng, Tuan Y. "The ROC's Changing Role in the Asia-Pacific Region." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards NSW: Allen and Unwin Australia, 1994.
- China Economic News Service, *Weekly News.* Uniform Resource Locator: <http://www.cens.com/cens/general.html>.
- Chiou, C. L. "Emerging Taiwanese Identity in the 1990s: Crisis and Transformation." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards NWS: Allen and Unwin Australia, 1994.

- Clough, Ralph N. *Reaching Across the Taiwan Strait: People to People Diplomacy*. Boulder, CO: Westview Press, 1993.
- Dahlman, Carl J., and Ousa Sananikone. *Economic Policies and Institutions in the Rapid Growth of Taiwan (China)*. Unpublished Draft, 1993.
- Ding Jingping. *China's Domestic Economy in Regional Context*. Washington, D.C.: The Center for Strategic & International Studies, 1995.
- Free China Journal (Business)*. Uniform Resource Locator: <http://www.taipei.org/>.
- Free China Journal (Economy)*. Uniform Resource Locator: <http://www.taipei.org/>.
- Free China Journal (Politics)*. Uniform Resource Locator: <http://www.taipei.org/>.
- Fu Dongcheng. "Prospects of Hong Kong-Taiwan-Mainland Economic Unification." *Chinese Economic Studies*, Winter 1993-1994.
- Gu Weiqun. *Conflicts of Divided Nations: The Cases of China and Korea*. Westport, CT: Praeger, 1995.
- Hickey, Dennis Van Vranken. "Will Inter-China Trade Change Taiwan or the Mainland?" *Orbis*, Fall 1991.
- Hook, Brian. "Political Change in Hong Kong." In *Greater China: The Next Superpower?*, edited by David Shambaugh. New York: Oxford University Press, 1995.
- Hou Chi-ming. "Toward Taiwan's Full Participation in the Global System," In *The Chinese and Their Future*, edited by Zhiling Lin and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- Hsieh, John Fuh-sheng. "Chiefs, Staffers, Indians, and Others: How was Taiwan's Mainland China Policy Made?" In *Inherited Rivalry: Conflict across the Taiwan Straits*, edited by Tun-jen Cheng, Chi Huang, and Samuel S. G. Wu. Boulder, CO: Lynne Rienner Publishers, 1995.
- Huan Guaocang. "Changing China-Taiwan Relations." In *The Chinese and Their Future*, edited by Zhiling Lin and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- Huang Chi and Samuel S. G. Wu. "Inherited Rivalry: A Chronology." In *Inherited Rivalry: Conflict across the Taiwan Straits*, edited by Tun-jen Cheng, Chi Huang, and Samuel S. G. Wu. Boulder, CO: Lynne Rienner Publishers, 1995.
- Jones, Randall S., Robert E. King, and Michael Klein. "Economic Integration between Hong Kong, Taiwan, and the Coastal Provinces of China." *OECD Economic Studies*, Spring 1993.
- Kleykamp, David. "The U.S.-Taiwan Trade Problem: An American Perspective." In *China in Transition: Economic, Political, and Social Developments*, edited by George T. Yu. Lanham, MD: University Press of America, 1993.
- Klintworth, Gary. "Australia-Taiwan: The Evolving Relationship." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards, NSW: Allen and Unwin Australia, 1994.
- Kreisberg, Paul H. "Asian Responses to Chinese Pressures on Taiwan." In *If China Crosses the Taiwan Strait*, edited by Parris H. Chang and Martin L. Lasater. Lanham, MD: University Press of America, 1993.
- Kuo, Shirley W. Y. "The Taiwanese Economy in the 1990s." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards, NSW: Allen and Unwin Australia, 1994.

- Leng Shao-chuan and Lin Cheng-yi. "Political Change on Taiwan: Transition to Democracy." In *Greater China: The Next Superpower?*, edited by David Shambaugh. New York: Oxford University Press, 1995.
- Lin Chong-pin. "Beijing and Taipei: Dialectics in Post-Tiananmen Interactions." In *Greater China: The Next Superpower?*, edited by David Shambaugh. New York: Oxford University Press, 1995.
- Luo Qi and Christopher Howe. "Direct Investment and Economic Integration in the Asia Pacific: The Case of Taiwanese Investment in Xiamen." In *Greater China: The Next Superpower?*, edited by David Shambaugh. New York: Oxford University Press, 1995.
- Mark, Jeremy. "Election Aftermath: Taiwan Relaxes after a Bout of Anxiety over China Ties." *Asian Wall Street Journal*, December 13, 1994.
- Peng Tianxiang. "Developing Trilateral Economic and Trade Cooperation between the Mainland, Hong Kong, and Taiwan—The 1990s." *Chinese Economic Studies*, Winter 1993–1994.
- Rafferty, Kevin. "China's Grasp and Hong Kong's Golden Eggs." *Harvard Business Review*, May–June 1991.
- Robinson, Thomas W., and Zhiling Lin. "The Chinese and Their Future." In *The Chinese and Their Future*, edited by Zhiling Lin and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- Schive, Chi. *Taiwan's Economic Role in East Asia*. Washington, D.C.: The Center for Strategic and International Studies, 1995.
- Simon, Denis Fred. "The Orbital Mechanics of Taiwan's Technological Development: An Examination of the 'Gravitational' Pushes and Pulls." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards NSW: Allen and Unwin Australia, 1994.
- Sung Yun-wing. "Patterns of Economic Interdependence in the Natural Economic Territory." In *Southern China, Hong Kong, and Taiwan: Evolution of a Subregional Economy*, edited by Jane Khanna. Washington, D.C.: The Center for Strategic & International Studies, 1995.
- . "The Hong Kong Economy—To the 1997 Barrier and Beyond." In *The Chinese and Their Future*, edited by Zhiling Lin and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- Suttmeier, Richard P. "Greater China and the Development of Science and Technology." In *The Chinese and Their Future*, edited by Zhiling Lin, and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- Taiwan Economic Daily News*. Uniform Resource Locator: <http://www.wtdb.com/twnnews/twnnews.htm>.
- Tung, Ricky. "Taiwan and Southern China's Fujian and Guangdong Provinces." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards NSW: Allen and Unwin Australia, 1994.
- U.S. Trade Representative. *Foreign Trade Barriers*. Washington, D.C.: U.S. Government Printing Office, 1991.
- Wang Jun. "Expansion of the Southern China Growth Triangle." In *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, edited by Myo Thant, Min Tang, and Hiroshi Kakazu. Hong Kong: Asian Development Bank, 1994.



- Wei Yung. "The Effects of Democratization, Unification, and Elite Conflict on Taiwan's Future." In *The Chinese and Their Future*, edited by Zhiling Lin and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- Weng, Byron S. J. "The Evolution of a Divided China." In *The Chinese and Their Future*, edited by Zhiling Lin and Thomas W. Robinson. Washington, D.C.: American Enterprise Institute, 1993.
- World Bank. *World Development Report*. New York: Oxford University Press, 1995.
- Wu Hsin-Hsing. *Bridging the Strait: Taiwan, China, and the Prospects for Reunification*. Hong Kong: Oxford University Press, 1994.
- Wu Yushan. "Economic Reform, Cross-straits Relations, and the Politics of Issue Linkage." In *Inherited Rivalry: Conflict across the Taiwan Straits*, edited by Cheng Tun-jen, Huang Chi, and Samuel S. G. Wu. Boulder, CO: Lynne Rienner Publishers, 1995.
- Xu Xinpeng. "Taiwan's Economic Cooperation with Fujian and Guangdong: The View from China." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards, NSW: Allen and Unwin Australia, 1994.
- Yahuda, Michael. "The Foreign Relations of Greater China." In *Greater China: The Next Superpower?*, edited by David Shambaugh. New York: Oxford University Press, 1995.
- Yearbook of the Republic of China*, 1996.
- Yeh, Milton D. "Ask a Tiger for Its Hide? Taiwan's Approaches to Economic Transactions across the Strait." In *Southern China, Hong Kong, and Taiwan: Evolution of a Subregional Economy*, edited by Jane Khanna. Washington, D.C.: The Center for Strategic & International Studies, 1995.
- . "Shop-front in Hong Kong, Manufacturing in the Mainland." In *Taiwan in the Asia-Pacific in the 1990s*, edited by Gary Klintworth. St. Leonards, NSW: Allen and Unwin Australia, 1994.
- Yin, Jason Z., and Charles C. Yen. "An Assessment of the Economic Relations between Taiwan and Mainland China." *American Asian Review*, Winter 1992.

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